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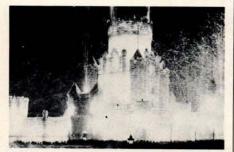
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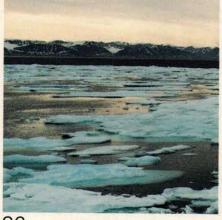
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A JOURNAL OF DESIGN AND CREATIVE LIVING JANUARY/FEBRUARY, 1983 VOL. 9 NO. 1

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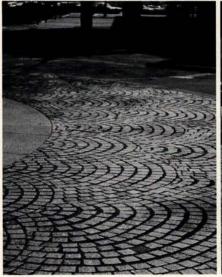
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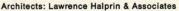
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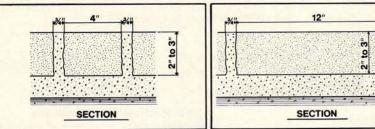
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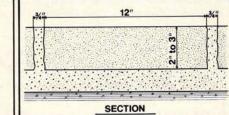
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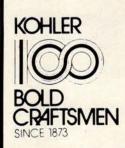
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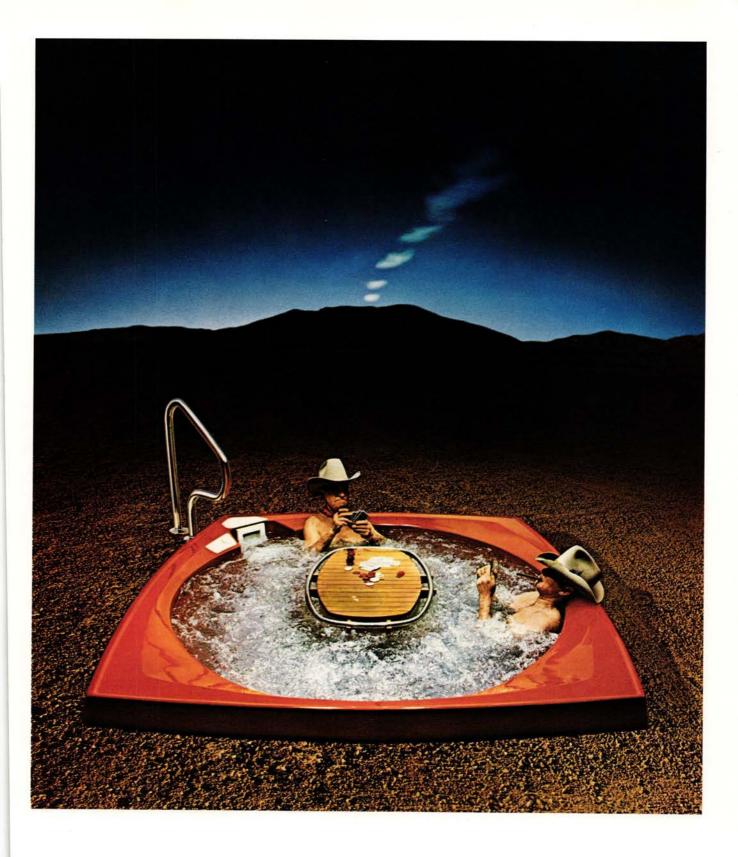
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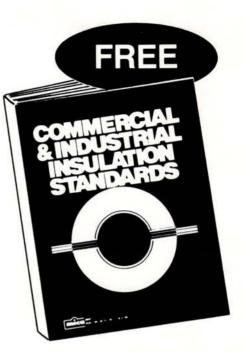
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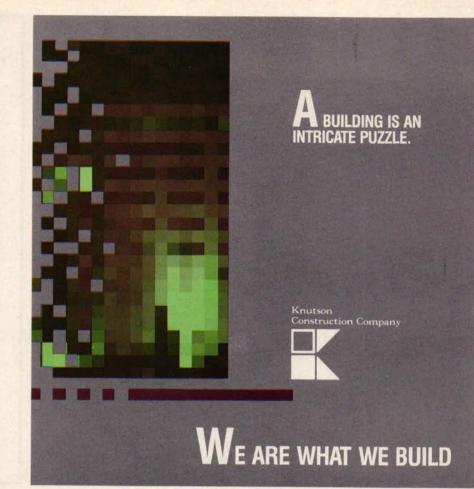
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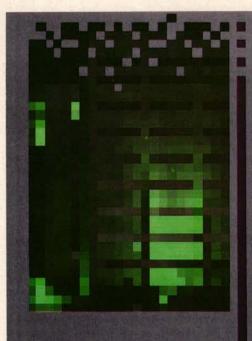
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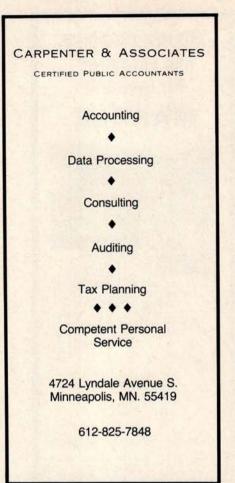
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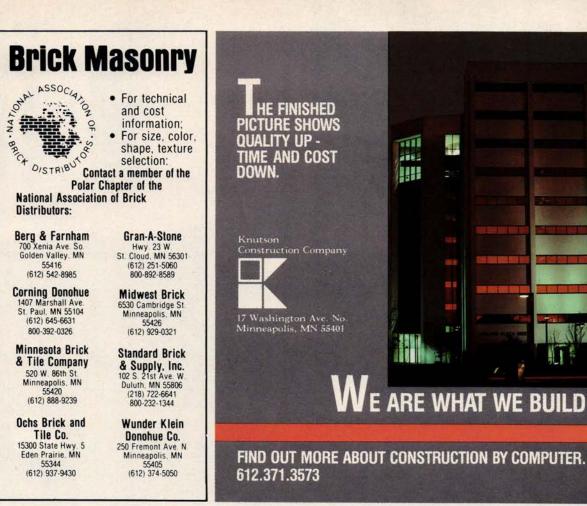
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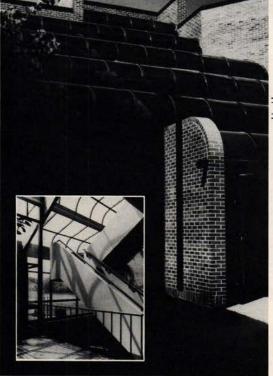
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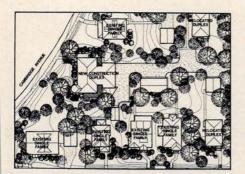
Designer of innovative campus building wins government award

The Reagan administration has honored BRW Architects, a Minneapolis firm, for its design of the Civil/Mineral Engineering Building at the University of Minnesota, Minneapolis campus. David Bennett, a firm principal and design architect for the project, received a certificate of recognition January 17 from the Department of Consumer Affairs. It was presented by State Representative Fred C. Norton.

The Civil/Mineral Engineering Building was mandated by the Minnesota State Legislature in 1979 to be a demonstration project in state-of-theart design of earth-sheltered and energy conserving buildings. Its two most innovative features are the 48,000 square feet of laboratories mined 110 feet below grade and the first underground application of high-technology solar optic daylighting systems.

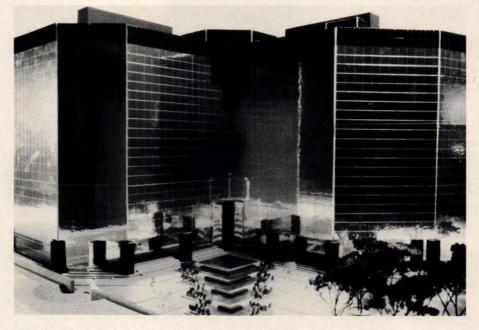
BRW Architects was one of four firms to receive a certificate of recognition from the Dept. of Consumer Affairs. They were presented to the projects selected last year in the prestigious Energy Conservation Awards program sponsored by Owens-Corning Fiberglas Corporation.

AM will cover the Civil/Mineral Engineering Building in greater detail in a future issue.



College, neighborhood collaborate on unique rehab project

An unusual enterprise by Macalester College in St. Paul dispells the notion that colleges make bad neighbors. When the college presented plans to build



New Nicollet Mall office building to reflect historic church

Northwestern National Bank, Lincoln Branch, will occupy the first floor of a new office building designed by Minneapolis architecture firm Bentz/ Thompson/Rietow, Inc., for the Abbott-Swanson Development Company. It is now under construction on Nicollet Avenue in the last, and newest, block of the mall.

A formal composition in silver and black, the new building is designed to literally reflect its historic neighbor, Westminster Presbyterian Church. The church had owned the land and imposed several conditions in its sale: the building could not be taller than eight stories (about the height of the church tower), had to include a plaza open to church use, must provide parking for Sundays, evenings and holidays, and not obstruct the view of the church from the south.

Bentz/Thompson/Rietow satisfied those requirements by designing an Lshaped building around a plaza. The plaza is to keep the church in the foreground and to encourage public use by continuing the aggregate and brick paving of Nicollet Mall. The silver reflective glass set in black mullions will mirror the church's rose window.

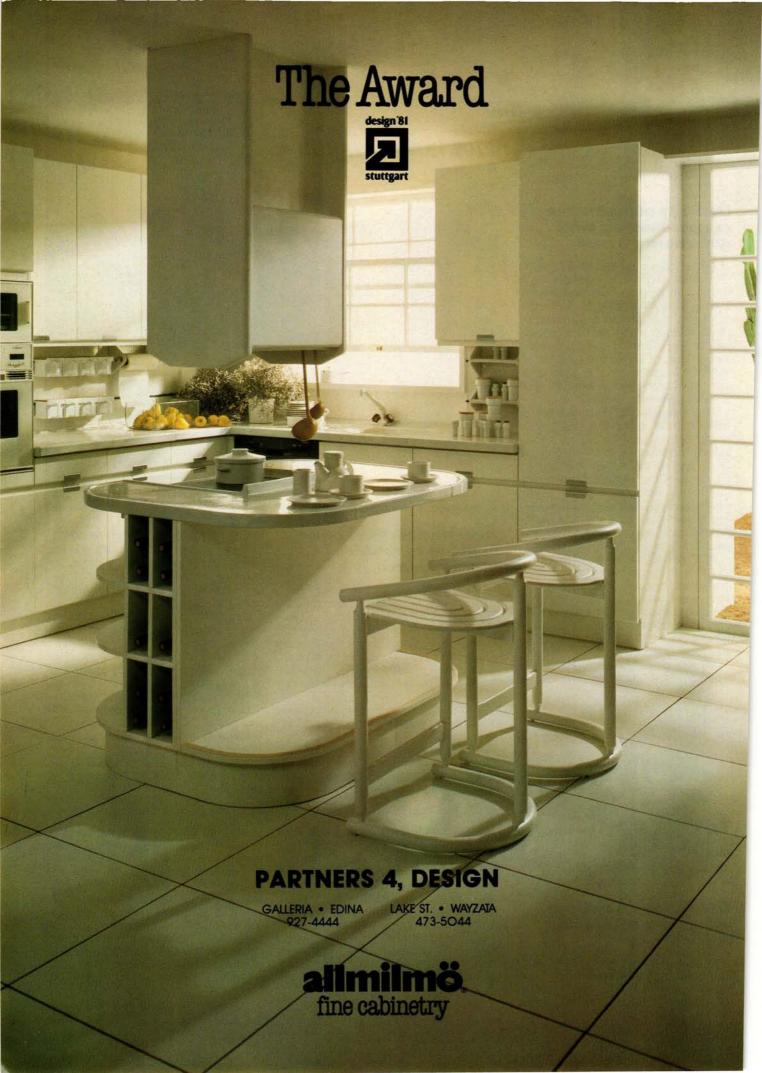
Milo Thompson is the project designer and Bruce DeJong the project architect. The \$9 million, 145,000 square foot building is to be completed by December.

20 to 25 townhouse condominiums on a block next to the school, nearby residents objected, preferring to see the neighborhood pattern of single-family homes maintained. Macalester agreed and a rehabilitation project called High Winds was begun with Winsor/Faricy Architects, St. Paul, as project architect.

The Princeton-Cambridge block, previously all rental property, is now a mixed-density neighborhood of eleven owner-occupied homes. They include two relocated duplexes, a newly constructed duplex and five remodeled single-family homes. All are connected to Macalester's heating plant, making the project an experiment in hot water district heating as well.

The final site plan and design considerations were hammered out in two years of meetings between the Macalester Park Development Committee—the neighborhood group, Macalester College and Winsor/Faricy Architects. During construction, committee members helped determine

Continued on page 58



scanning the media

Being a collection of hard facts and appealing notions gleaned from the pages of periodicals you'd read if you had the time

Chic tickets

YOU CAN LEAD A CITY DWELLER TO THE SUBWAY BUT YOU CAN'T MAKE HIM TAKE IT. A smooth, fast ride won't induce people to leave the car at home if they perceive mass transit as ugly, tedious or dangerous. What does get people underground? Public art and imaginative programming, according to a report in the December '82 *Places*, newsletter of Partners for Livable Places.

Paris leads the way in Metro animation. Wrestling matches, garden shows, artists at work—even the entire Paris Circus—draw people underground and relieve the sense of alienation. A full-time marketing division plans the programming and extensive publicity and develops promotional materials from key rings to records and films.

In keeping with its quieter nature, Stockholm has a more cultural but equally innovative approach to enlivening its subway. When the city built thirty-six new stations through solid granite, it decided to "accept the cave." One or more artists designed each station, making them readily identifiable as well as visually stimulating. Partners suggests American cities learn from their European counterparts and promote the notion that subways are "in" not down.

Towering arguments

WHILE ARCHITECTS HAVE ETERNALLY AR-GUED THAT QUALITY DESIGN PAYS, CORPO-RATE AND COMMERCIAL REAL ESTATE DEVEL-OPERS ARE NOW ONLY CONVINCED BY SOME HIGH-VISIBILITY EXAMPLES, *Business Week* (Oct. 4, '82) notes. The success of AT&T and Citibank Center have spurred other corporations to vault themselves into the public eye with image-building structures. As corporate developer Gerald D. Hines notes, "Companies spend a lot of money advertising their image. They can cut that back if they have an outstanding building that gains national attention."

Quality design is seen to have other bottom-line assets. Premiums of \$3-\$4/square foot rent can be charged. (In fact, rents were so lucrative in its new tower that most Citibank offices never moved in.) And "extras" such as atriums, higher ceilings or energy-saving systems boost worker productivity. "I can't prove it," says one CEO of a vaulted interior court, "but I know it improves our effectiveness." As another notes, "Classy architecture really pays."

Little House reincarnated

THE INSTALLATION OF THE LIVING ROOM OF FRANK LLOYD WRIGHT'S LITTLE HOUSE IN THE METROPOLITAN MUSEUM OF ART HAS OPENED TO GREAT FANFARE. The Met acquired the 1912–1914 era house when it was threatened with demolition on its Wayzata, Minnesota, site in 1972. The museum kept the living room to be installed in its new American Wing and sold off the rest. The room was opened in December, 1982.

The addition of the Little House represents "a notable occasion for the America Wing and the museum," according to the Metropolitan Museum of Art *Bulletin* (Fall '82). "Our holdings now constitute what is perhaps the finest Wright collection in any museum." The room will be the most contemporary of the museum's period rooms. It is the American Wing's first major commitment to American arts and crafts design, and as such it represents a new direction for its American collection. The Met calls the living room "magnificent."

Saved by the city

NEW YORK'S PROJECT SAVE (SALVAGE OF ARCHITECTURALLY VIABLE ELEMENTS) IS THE NEWEST OF PUBLIC SALVAGE DEPOTS, *Planning* (Nov. '82) reports. The company rescues everything from doorknobs to statues from city-owned buildings slated for demolition. Several other cities run such salvage projects, among them Baltimore, which started one in 1975 to supply missing building parts to city homesteaders. CETA-funded labor and community development fund subsidies help keep the city-owned companies afloat financially. But New York hopes Project SAVE's popular sales will make it self-supporting in the near future.

Conventional white elephants

SHOULD EVERY CITY HAVE THE ULTIMATE CONVENTION CENTER, Planning (Nov. '82) asks? From Peoria to Seattle, civic pride argues for a larger center than the market would merit. Fifty-eight of 88 cityowned facilities are now losing money, and capital costs of \$2,000 per seat make future economic success unlikely. "We're losing but it's worth it," is often the attitude of local boosters who cite the impact of conventioneers' spending on the local economy. But those estimates are easily exaggerated; state conventions do not necessarily draw big spenders. Richard Kinville, executive director of the International Association of Auditorium Managers, notes that for a city to attract conventions it not only needs a facility, but lots of hotel space, good transportation in and out of the city and "something unique"—some attraction to draw fickle conventioneers.

Open offices for better business

THE OPEN PLAN OFFICE, ADAPTED FOR THE '80s, IS HERE TO STAY, *Buildings* (Oct. '82) reports. Systems furnishings already account for half the sales of business furniture, and their share is growing. Since its development in the late '60s the open plan's two major economic benefits have sold it: maintenance and long-term costs are lower, and flexibility in space use is higher.

Higher employee productivity under the open plan has been convincingly measured. The Minneapolis office of McQuay-Perfex, Inc., manufacturers of heat transfer products, documented \$200,000 of savings in higher productivity when it switched its 430 employees from a bullpen setup to an open office plan. And the gain has been maintained over the years. With the white collar sector rapidly expanding and the focus on upping worker productivity, the open plan's future may be assured.

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editorial

Sorely needed: a graduate school for winter architecture

William Rogers, the engaging University of Minnesota official who is known to many in the U.S. and Canada as "Mr. Winter City," has a slide show he is ready to plug in at the drop of an extension cord. Audiences find his presentation exceedingly intriguing, in part because it is delightfully idiosyncratic. For as Bill Rogers makes manifest, hardly anyone pays much attention to winter. Most especially, design professionals in our northernmost cities do not pay much attention to the harsh dictates of climate when creating and assembling the discrete parts of the built environment.

To drive home this essential point, Rogers flashes two slides consecutively on the screen. The first shows the skyline of Houston, Texas; the second the skyline of Calgary, Alberta. With but minor modifications in their profile, the two skylines could be superimposed. So, too, could their glass curtain-walled skyscrapers and most other planning and architectural features.

Architects might be expected to be among the first to acknowledge that Houston and Calgary, in most important respects, are worlds apart. Moreover, they ought to appreciate the fact (for aren't they taught such things in school?) that to design buildings for these two cities as if they were interchangeable is climactically insensitive. (Let us not beg the question as to where—in Houston or Calgary—it is *more* climactically insensitive.)

But are architects and planners in fact taught to design winter cities? I have asked eminent practitioners and educators whether the curricula of, let us say, the U. of Minnesota and the U. of Southern California differ in significant ways. Their collective response may be considered unequivocal: Yes, there may be minor differences of emphasis; USC's aspiring architects are required, for example, to learn more about seismic forces. But no, there appears to be no school where architecture for winter environments is taught. Why shouldn't we have such a school? Or at least a graduate school, where, after learning how to practice architecture to the satisfaction of all jurisdictions that license practitioners, a person may gain special insight and expertise in *winter* architecture?

One of this issue's contributors, Professor Jeffrey Nash of Macalester College, reports on the findings of a study carried out by his intrepid though chilblained students during three successive Januarys in the Twin Cities. What happens mostly, they discovered, is that a tacit agreement is reached to "suspend the norms." Which is to say, those who both run the winter cities and live in them like to pretend winter is but a temporary inconvenience. What a way to run a railroad, or cities such as Minneapolis, St. Paul, Calgary, Edmonton and Winnipeg, where the "norms" may be "suspended" for as long as five months every year.

What would a graduate school of winter architecture teach? There having never been one to learn from, who can say? It is not difficult, however, to imagine some of the basic subject areas that *ought* to be taught. The role of technology, for example, in the more artful *roofing over* of high-density, intensively used urban spaces. (I refer you to the coverage of Eaton Centre in this issue; here, surely, is a constructive model of how the very heart of a major city is better served by a literal blockbuster of a covered retail environment than by either skyways or subways.)

Winter cities need to consider density quite differently than Sunbelt cities. Also the nature of year-round recreational spaces and facilities. Also energy conservation. The list, in truth, might be extended to encompass all of the major architectural and planning considerations that must be entertained in the design of urban places—except winter cities need them most rigorously applied to the manifold problems which historically have been simply buried in the snow.

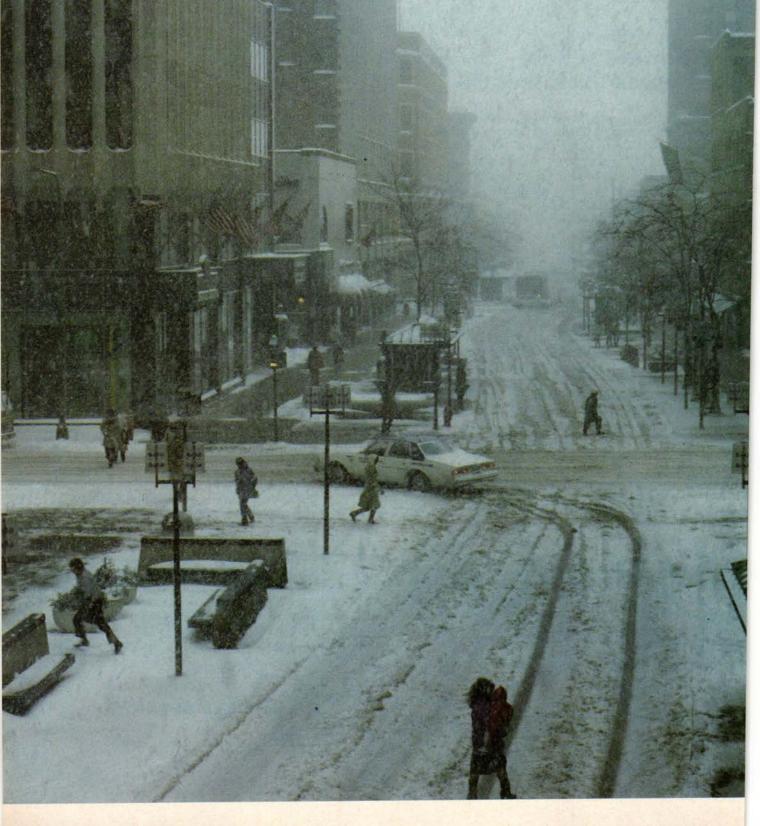
Do I hear a second to the motion that some unfettered school of architecture in the northern climes start a graduate school of winter design and planning? Or failing that, is there a school willing to at least commence researching the concept of such a school?

AM would like to hear a second to either motion.

server

William Houseman Editor

An Archi



tecture For Winter

icollet Mall has long been admired as a model of vitalizing urban design. Admired, that is, roughly two-thirds of each year. During the four or more winter months, such desolate scenes as this one occur over and over. Indeed, this single photograph capsulates the surrender of an otherwise progressive city to winter's intimidating bluster. But Minneapolis is not alone. Most of its sister winter cities around the top of the world are in the same ice-jammed boat: Sapporo, Moscow, Reykjavik, Calgary, Winnipeg, Duluth and St. Paul, among others. They are still struggling to take the first feeble steps toward creating a truly, enjoyably livable environment for winter, by design.



What are their prospects for success in the foreseeable future? AM's editors believe they are not only excellent but begging for attention. In the process of editing this issue, we interviewed a sizable number of architects, planners and politicians. Also a new breed of professional, the winterologist, admirably represented by William Rogers, director of the University of Minnesota's World Affairs Center and co-author of The Winter City Book, and John C. Royle, an Ontario writer and editor. A sampling of their ideas is enumerated below and illustrated on the following pages:

More rational density. Urban sprawl is the arch-enemy of coherent, conserving winter cities. Example: The residential densities of Dallas and Winnipeg are roughly the same; but whereas the Dallas city water lines may be buried less than two feet, those in Winnipeg must be sunk a burdensome 16 feet. Similar penalties are self-imposed in public transit, energy demands, utilities and public institutions.

Comprehensive roofing over. Here and there in northern cities, whole streets are being covered in transluscent materials. Eaton Centre goes an audacious step further by roofing over a whole street (see page 24). And why not? The technology is fully developed to protect whole communities from wintry weather conditions.

Sympathetic color, form, texture and ornament. AM asked a number of design professionals and cultural leaders for their ideas of good and bad "winter architecture." A preponderance of them named such ornate and stately traditional buildings as the Swedish-American Institute in Minneapolis, the Landmark Center in St. Paul and even the Kremlin as good winter buildings. Most summarily castigated glass curtain-wall towers as bad winter buildings.

Innovation. Architect Ralph Erskine's "long wall" cities and engineer David Geiger's bubble-encased communities are but the merest suggestions of how creative technology may transform urban settlements in the severest of winter climates. Buildings can be heated without furnaces. Plastics may be used to shape instant buildings for tundra terrain. Indeed, knowing what we can do, winter cities could be made so compellingly attractive as to steal tourists from Miami in February. If, of course, their citizenry aspires to.

On the one hand, winter cities should look better . . .



Bright-colored roofs compensate for limited light, flora in Reykjavik.



Quintessential wintriness is felt in Kremlin's color, form, pattern, trees.



Scale, form, density of old German town bespeak timeless quality.



The warmth of natural wood lends organic validity to a vacation house in a wooded setting. Architect: Architectural Alliance.



American Swedish Institute, by Boehme/Cordella: a fine winter foil.



Stone and steep-roofed U. of Minnesota Landscape Arboretum appears indivisible from winter setting. Architect: Edwin H. Lundie.



Greenway Gables' compact massing, pattern are etched in snow season. Architects: Bentz/Thompson/Rietow.



Diners at St. Paul's Town Square enjoy winter in snow-flecked atrium.

and on the other, they must work much better.



Cut-out in Royal Bank Building, Ot-tawa, assures others' solar gain.



Model of domed all-weather Lindsay Park, Calgary. By: Geiger/Berger.



Gulf Canada Square, Calgary, boasts world's top energy-saving system.



Long wall for a town, a concept of Swedish-based Ralph Erskine, finds expression in Fermont, Quebec. Ar-chitect: Norbert Schoenauer.



Transluscent bubble is weatherproof pedestrian walkway in a down-town section of Quebec City.



Domed 750-foot-long student dorm complex at U. of Alberta's Edmonton campus is winter-free link with other buildings. Main "street" has shops (below).



A winter city lesson in a great winter "street"

EATON CENT

The great sculpture assembly of Canadian geese silhouetted against the vaulted glass roof might better be seagulls. For as architect Eberhard Zeidler himself has suggested, Eaton Centre looks for all the world like some gigantic cruise ship steaming incongruously through the heart of downtown Toronto. The analogy fails entirely, however, to acknowledge this extraordinary project's importance as an architectural catalyst for making a good city—particularly a good winter city—work better.

Eaton Centre functions as a mall and, indeed, that is what its 400 retail establishments and their 600,000 weekly customers think it is. But it is really a street. And therein lies its significance as a powerful energizing influence on the immediate surroundings, as well as on

the whole city. Zeidler has observed, "Cities such as Toronto and Montreal live in an equally harsh winter climate in which the open street and the open plaza can be used fully only during the summer season. The solution to such a climate, which Montreal pioneered and unfortunately Toronto fol-lowed, was to bury its citizens below ground. Functionally, these below-grade connections are successful; however, they have weakened the fabric of the city and turned the open street into a raceway for cars." Zeidler further believes that the opposite strategem adopted by such places as Calgary and the Twin Cities-lifting the pedestrian above ground-produces the same debilitating consequence: Both solutions ignore the lesson of a distinguished Toronto resident, Jane

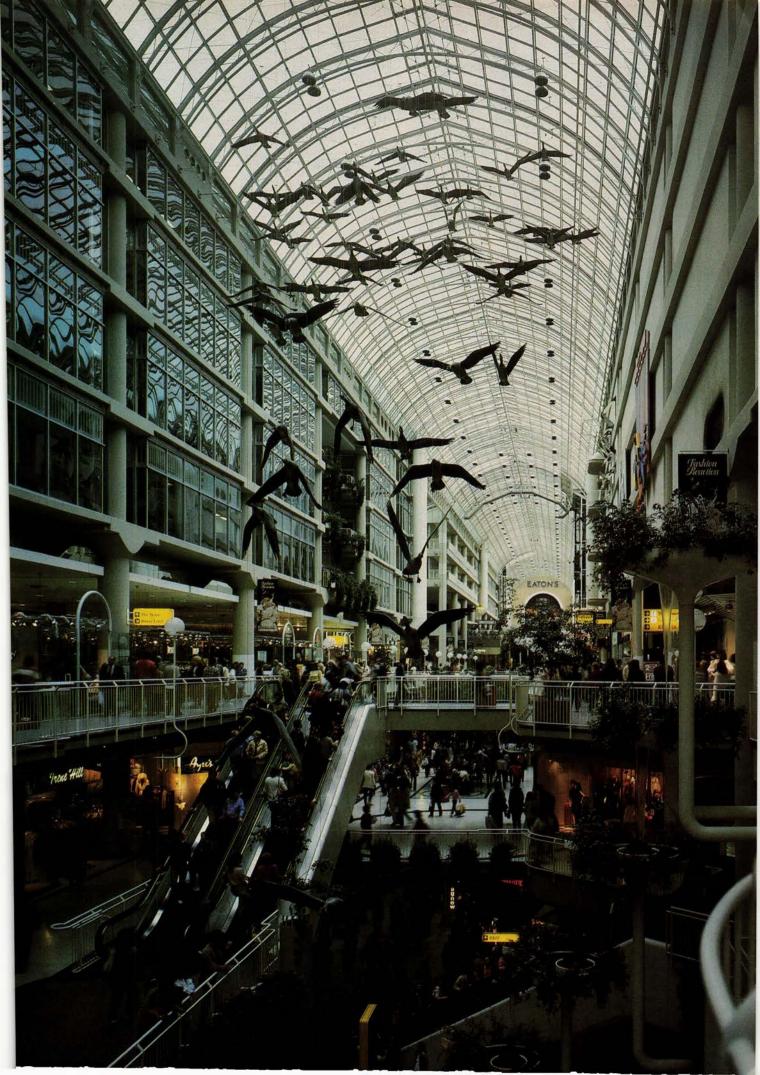
Jacobs, who wrote that the street life's the thing.

Eaton Centre represents the viable urban alternative. Not only does it function as a street, running a remarkable 860 feet and culminating at either end in Eaton's and Simpson's, the city's two great department stores-it is also designed to strengthen Yonge, the important retail street that runs parallel to it. Both in scale and character, as the photo below makes clear, the structure's Yonge Street facade is appropriately diffident. Moreover, its numerous ground level and mezzanine retail shops help to generate a street vitality that enormously benefits the old pre-Eaton Centre merchants across the street.

Doubtless, Toronto's lesson in city revitalization applies wherever the future of streets is at issue.



The facade of the Centre's outer "edge" on Yonge Street is a light steel framework hung by tension cables—"reminis-cent of the North American cast iron period." Glass-roofed "Galleria" (opposite) soars 127 feet from lowest level.





"Street" character is established through trees, seating, paving to orient strangers.



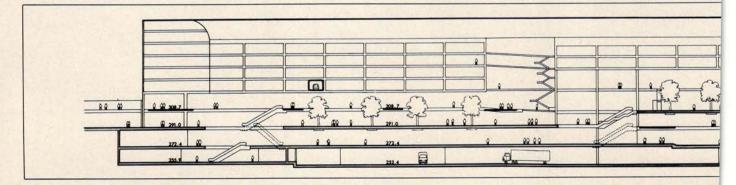
Benches in deck recesses are located for both pedestrian comfort, people-watching.



Column spoofs postmodern.



Entrance to Centre gains a ceremonial importance through a transitional atrium.

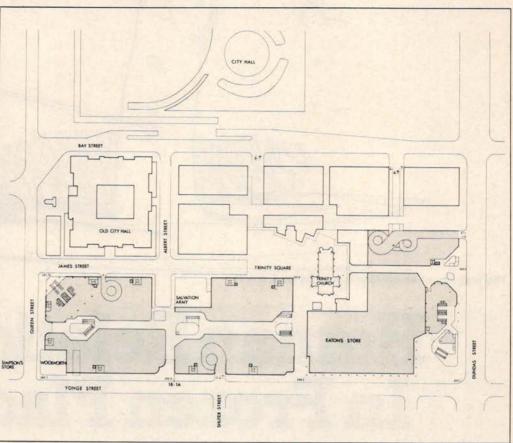


The Centre acts as a new engine to power the old chassis.

The Eaton Centre site plan (right) makes clear at a glance the exceptionally snug "fit" of the 860-foot long mall within the existing urban fabric—with To-ronto's celebrated pair of semi-elliptical City Hall towers, historic Trinity Church, and the major arteries of Queen and Yonge Streets all close at hand. A critical first step in the project's development re quired that Eaton's department store be relocated from its historic position across Queen Street from its prime competitor Simpson's. Eaton's agreed to anchor the north end of the Centre. Thus, paradoxi-cally, the basic strategy of suburban shopping malls which places its strongest retail stores at opposite ends was also essential to the Eaton Centre concept. Here, however, the similar-ity ends; for while suburban mails typically are iso-lated from the surrounding environment by a sea of parking, the Centre forms a dynamic bond with the neighborhood.

Such a happy state of affairs is made possible not only because the Centre's substantial parking levels absorb its patrons' autos but also because a preponderance of visitors either arrive on foot from their nearby workplaces, or by subway. It is notable that office workers in the upper levels of the Centre may view the bustle below, very much as if they were hard by a public park (see sections).

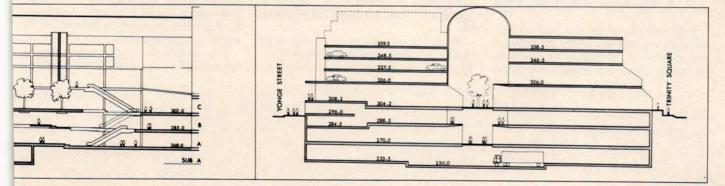
"Originally," says architect Zeidler, "I thought the required length of our Galleria of 860 feet was too long and should be subdivided into a visual length not unlike the Galleria in Milan. However, this

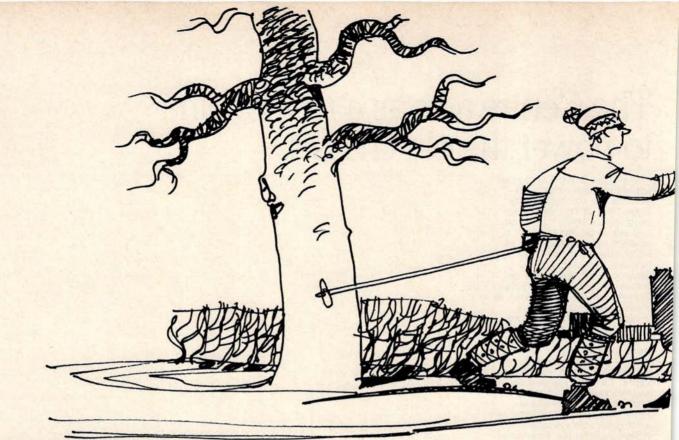


seemed to create an alien pattern in the city's matrix and also proved to be visually unnecessary. I think that the completed Galleria confirms this assumption." To achieve the essential visual proportions of height and width, Zeidler created an illusion of width twice that of its actual 28 feet and detailed the facades to reduce the monumental sense of height.

Another critical aspect of the Centre's planning phase was simply, where in this 3.9 million square foot project should the entrances go? Major access was developed at four points which were conceived of as appreciably more vital than mere doorways. "We felt very strongly," recalls Zeidler, "that the mall should not lapse into a world of fantasy, of imitating 'make-believe' scenery, so common in North American shopping malls, but should find meaning from the reality of urban activities. A logical extension of this concept

was to create activity nodes where they would be found in a city—at the intersection of streets." Accordingly, the entrances form strong visual and experiential links between the street and the Galleria. A person entering the mall from the Queen Street subway station, for example, can see the Galleria's great glass roof for nearly its total length from this lowest level. Similar visual sensations strike the viewer at the other major entrances.





The majesty of being above, and beyond, it all.

Human Relations In Frozen Places

A team of cherry-nosed observers has found that people act differently in winter cities. Besides "officious displays" of bravado, they seem to behave more democratically.

If it be true that the temper of the mind and the passions of the heart are extremely different in different climates, the laws ought to be in relation to the variety of those tempers.

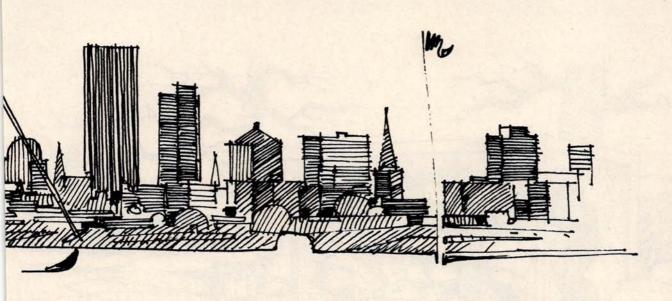
Montesquieu The Spirit of the Laws, 1784

The effects of prolonged winter weather on public order have been overlooked in sociological research literature. There is a tendency to think By Jeffrey E. Nash

of weather as merely a condition. Classical theorists have insisted that the final explanation of social phenomena must be found in the social world itself, and thus the analysts have turned their attention away from a detailed description of the role of climate in social life. This, I believe, is regrettable.

Typically, questions of a sociology of weather are glossed or sidestepped. When social scientists do treat "weather," they do so according to its capacity to disrupt routine life, as through floods and other natural disasters. Moreover, most data in studies of routine urban public life are presumably collected in warm weather cities; the climatic conditions under which a study's observations were made are rarely reported, having been regarded by the researchers as inconsequential.

ers as inconsequential. Yet, around the world, cities are located north of the 60th parallel. Among



them are several major United States cities which experience extreme winter weather for four or more months out of the year. In these cities, winter becomes a "normal" state of affairs. Two such cities are, of course, Saint Paul and Minneapolis.

As a sociologist, I have found that the Twin Cities provide opportune conditions for the study of the effects of prolonged winter weather on selected aspects of urban life. Indeed, during two recent winters I directed the members of research teams who invested some 350 hours in observing those aspects of public life most obviously "exposed" to winter conditions in the Twin Cities. These observers, divided into four teams, concentrated on four settings: parks, streets, ski resorts (within the city proper) and recreational centers (principally, skating rinks).

From the myriad observations gathered, several themes emerged. These themes can be thought of as organizing patterns of meaning that address the question, "What are we doing here?" The first deals with the communicating of intention (to sociologists, "officious displays"), the second with the reduced numbers of people in public, the third with attitudes of festivity and celebration, the fourth with the adaptability of those who frequently use public territories, and an all-important final theme—namely, the suspension of the norms that govern social order during the winter.

Officious Displays

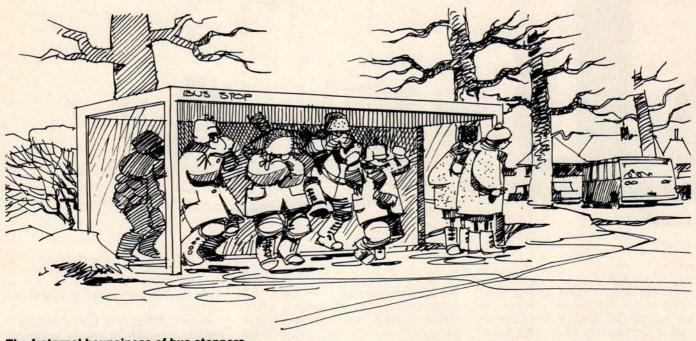
Erving Goffman writes of the "orientation gloss" which consists of gestures designed to communicate "official" purposes of behavior. We found that in the winter such gestures became exaggerated. Waiting for the bus, people stand on benches, crane to look for the bus every few minutes, pace up and down across the territory of the "stop." They jump up and down and blow on their mittens or gloves as if to warm their hands.

Phone booths located near a stop may be used as sheaths within which a ritual dance of warmth may be performed. By standing in the booth and jumping up and down, one can communicate waiting behavior and engage in "strange" movements within the semi-privacy of the sheath. Such devices relate official messages about what the person is doing outdoors in such conditions; and, most importantly, they show disdain with their public predicament.

A central theme of public behavior reflects a disdain for winter by "going about business as usual." Some communicate this theme by underdressing. A businessman will walk with a "deliberate normal posture:" upright slow gate with arms relaxed at his sides from building to building. He will do this without a hat or coat. A school boy will wait for the bus in a down vest unsnapped in zero weather. One observer reported being "flashed" while waiting for a bus downtown on a day when the temperature hovered near zero.

Where Have All the People Gone?

Observers recorded definite fluctuations in numbers of people outside according to weather conditions. "Weather conditions" refers not simply to temperature but to the sensation outdoors. In order to assess the relationship between weather and the numbers of people in public territories, the observers used an indicator based frankly on subjective judgment. A sunny zero day could be a really "nice" day. And even a sunny day with a low wind chill factor could be judged as



The fraternal bounciness of bus-stoppers.

"nice" if it came after a week of cloudy, snowy 10° days. Although nice days did bring out more people, it is important to note (1) that people were out even in the very bitter weather and (2) the peak days yielded numbers of people far below the summer averages.

The Festive Attitude

Either during or after a heavy snow, people in public often display a festive attitude. It is as if the weather itself is cause for celebration. Reported one observer after a heavy snow, "The routine glosses for parents are to stand around at the top of the hill, intervening on behalf of the smaller children, or to sit in an idling car with the heater on and wait for their kids. Today it was different. Old ladies were laughing like crazy. Distinguished-looking middleaged men were guffawing in the snow. The sight of a grandma careening down the hill on a blue, plastic space-age rocket sled was indeed extraordinary.'

Another park observer noted the same phenomenon. After several weeks of bitter cold, the sun came out and the temperature rose into the teens. Gradually, the park filled with people. They were sledding, cross-country



The sprightliness of the long-distance runner.

skiing and even picnicking in the snow. Families and groups of young people spread blankets, buried six packs in the snow and got out the food. It was like the Fourth of July.

The Marlboro Country Complex

The question arose: Do those who routinely use public space adapt well to it under winter conditions? Many, it seems, do. Runners reported their preference for wintertime training because of the "openness" of the roads. And the rink is yours on the bitter cold days: you can practice slap shots without fear of injury or reprimand.

One observer wrote, "I was standing on a hilltop watching a lonely crosscountry skier, silhouetted against the city skyline, cut across the frozen golf course. I could sense a mastery over the environment. For the moment, the numbness of my fingers was a reminder that I had taken this expanse for my own. If I were tough, brave, reckless enough, this city turf was mine."

This intuitive relationship with the cityscape was reported by several other observers. The streets became personalized; walking down the middle of a traffic lane normally crowded bumper to bumper with automobiles produced, for a fleeting moment, a sense of reclaiming that space. Using the ski areas, when others dared not, enhanced the experience of doing something special. (Skiers who refused to don headware—one observer called them "hatless wonders"—somehow demonstrated their mastery of the elements in admirable style.)

The Democratization of Winter Space

Public territories with fixed equipment and uses in the warm months often yield to a variety of uses in winter: It is as if democracy prevails out of season in questions of how to put the space to use. Bus stops offer more ready access to conversation. Benches may be stomped on. Phone booths may be occupied with no intent of making a call. A private country club opens its grounds to sledders and cross-country skiers-and hence goes public in the winter. In the sociologist's phrase, people are allowed many "norm violations." Some readily observable ones included the following:

- Allowing bus waiters to stand inside buildings (often blocking doorways).
- Relaxation of enforcement of the "no alcoholic beverages" law in parks.
- Late night practices of driving cars in such open spaces as parks, golf courses and school yards.
- A tolerance of the flagrant use of cul de sacs and parking lots by couples seeking "in city" places to park.
- Uncharacteristic leniency of the police in their use of crowd control techniques. (Noted an officer on duty at the massively attended funeral of a prominent politician, "If they choose to be out in this cold, they deserve to get a close look.")

Our evidence points not just to single events or isolated occurrences of increased freedom, but to a general pattern. The winter time order appears



The pizazz of the winterized grandma.

to operate on assumptions of temporariness, so that when winter conditions do prevail over long periods, a kind of anomie occurs while police and private citizens alike wait for the thaw.

In our study data, we see three major implications. First, human attempts, however unsuccessful, to deny nature distinguish both the symbolic and literal withdrawal of the majority—and the exploitation of this withdrawal by an active minority.

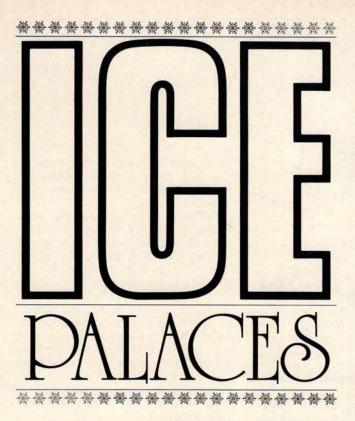
Second, our data suggest that space usages and policy directed at wintertime utilization should allow for increased individual freedom in definitions of territoriality. In short, planners should take advantage of the "cooled" sense of alarm that persons feel when using urban space during the winter.

Finally, the winter city no doubt exhibits different bureaucratic structures from other cities. Similarly, the consequent problems of transferring street layouts, architectural designs and other features of city planning from warm to cold weather cities need to be more fully understood.

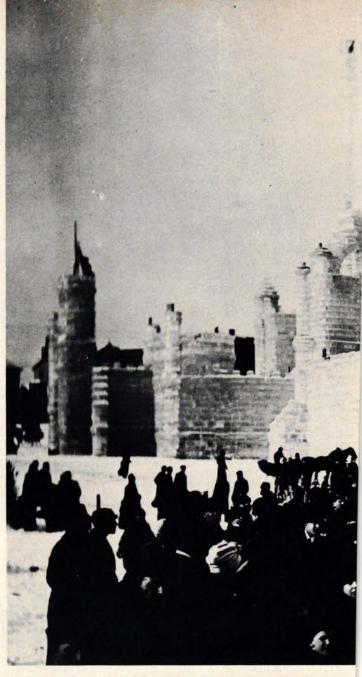
Jeffrey E. Nash, chair of the sociology department at Macalester College, specializes in the sociology of everyday life.



The muffled delights of frigid picknickers.



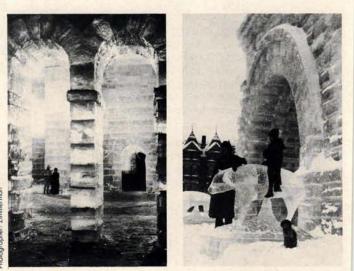
Shimmery symbol of St. Paul's warm regard for the rudest of seasons, these great crystalline monuments of the 1880s generated more architectural excitement, year after year, than most serious buildings. Besides, they proved to effete critics back East that Minnesota's capital city, by any measure, was not Siberia.



1887C.E. Joy's design was a Romanesque Revival fanta: 137 feet in the sky. The blanket toss remains a high



1886The first St. Paul ice palace, this fairy tale castle was designed by a Montreal firm.



1887Great vaulted interior spaces impressed visitors. Polar bears flanked the palace entrance.



194 by 217 feet. Its central octagon reached current "Ice Palace and Winter Carnival."



1888Palace and outworks covered an acre. A crowd of 30,000 witnessed the closing spectacle, the storming of the ice palace.

Like everything else, the ambitions of ice palace designers went down as the price of ice and labor went up

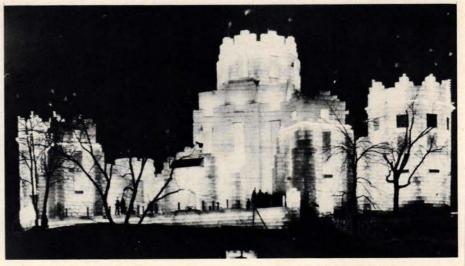




1937This palace with formal gateway (above) and imposing scale was one of the last to incorporate architectural references to romantic history. Huge crowd affirms its popularity.



1939⁰⁰ om-pahs of a carnival drew athletes.



1941 The nighttime glow of palace lights signaled winter's vulnerability to the sun. One tower of this modern castle housed a post office.

FIRE & ICE

By Kate Johnson

Ice palace—the words conjure images of unearthly beauty and deepest mystery. The Snow Queen lures robust young peasant men to her icy domain where they are slowly drained of warmth and life; Superman returns to a shimmering home in the frozen North to be revitalized by colored crystals from his native Krypton. The timeless theme of death and regeneration is thus conveyed in fairy tales, one ancient and one modern, through the image of the ice palace.

This is pretty heavy stuff. It is a surprise, then, to learn that the *same* architectural image was used also in the 18th century for that most frivolous of all Rococo inventions, the folly. While English lords built brand-new "ruins" in the parks of their country estates and Marie Antoinette played at being a milkmaid in her stage-set "farm" buildings at Versailles, the Empress Anna of Russia caused the first recorded "ice palace" to be built in 1741. This festival structure was located on a bank of the Neva River, measured 50 by 18 feet and was 21 feet high.

Needless to say, Empress Anna's particular conceit was only adaptable to a mid-continent locale with a Russianstyle climate. In fact, it was a practical amalgam of these two historical ice palace images-the gravely ritualistic and the amusingly entertaining-that came to Minnesota late in the 19th century. It came by way of Montreal where, in 1883, that city staged North America's first outdoor winter sports carnival. The spirit of civic boosterism was perhaps never higher than in the '80s, and the leaders of St. Paul (reacting to an eastern journalist's comparison of their city with Siberia) followed, in 1886, with the first "St. Paul Ice Palace and Winter Carnival."

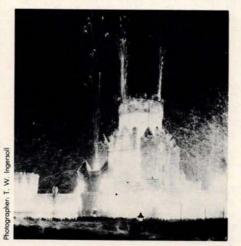
The ice palace was a symbol of civic pride. It made a virtue out of St. Paul's long, cold winter—the very factor that allowed the city to produce and maintain such a thing as an ice palace in the first place. And the early palaces and grounds were meant to attract huge crowds, as many as 30,000 people. Empress Anna's aristocratic toy had been transformed into Everyman's entertainment.

And what about the ritualistic aspect of St. Paul's ice palaces? The producers of that first Winter Carnival invented a scenario wherein King Borealis, the King of Winter, occupied the ice palace until the very end of the carnival. Then Fire King Coal, in a sort of early "son et lumiere" created with colored electric light bulbs and Roman candles, stormed the palace, as Spring defeated Winter. One can imagine a similar ritual struggle enacted within the standing stones of Avebury or Stonehenge. But ice palaces actually glowed from within, red and yellow, hot colors to herald the melting that would soon erase every trace of winter. St. Paulites know that over the years Borealis has become Boreas and Fire King Coal is now Vulcanus Rex.

The founders of the St. Paul Ice Palace and Winter Carnival originally envisioned annual carnivals for a thirtyyear period, but vicissitudes of weather and economy and the spiritual shock of the First World War intervened. The story of St. Paul's ice palaces, then, is contained in two major periods of building, the 1880s and 90s and 1937– 1947, with a brief revival in the 1970s.

The decade of the 1880s produced the three most spectacular ice pal-aces-those of 1886, '87 and '88. The first was a proper medieval castle with square central keep, corner towers and crenellated battlements, not unlike Windsor Castle. The second and third designs, by C.E. Joy, boasted, respec-tively, octagonal and round central towers and represented mainstream architectural fashion for masonry buildings of the time. Romanesque Revival forms dominated a host of eclectic historical elements and references. More important than style, however, was the fact that these early ice castles enclosed monumental interior spaces. Visitors glided through the blue-green light of huge vaulted halls and corridors decorated with ice sculptures and other glistening ornaments. Only in this early group of ice castles could one fully experience the fragile crystalline mystery of that other world of fairy tale dreams and ancient fears.

The warm winters of '89 and '90 were followed by several years of economic depression, and so the fourth ice palace wasn't built until 1896. This design,



"Storming of the Ice Palace," 1888.

called "Fort Karnival," capitalized on the military aspect of the earlier medieval castles at the expense of any allusion to their fantasy or luxury. It was probably simply an enclosure with a main entrance gate and corner block houses. Two more half-hearted attempts to revive the ice palace occurred in 1916 and '17. These, too, were ice *forts* wherein visitors did not experience translucent interiors. Frozen fortifications simply defined the activity area for Winter Carnival events.

The ice palaces of the period 1937 to '47 also reflected architectural fashions of the time, especially the Moderne and the International styles. In addition to being less literal about historical references to castle and palace forms, they functioned less as architecture and became, instead, grand stage sets for the rituals of Winter Carnival royalty. The Ice Palace of 1938 was virtually a compound throne, resembling the set for a Busby Berkeley musical number. Hollywood clearly influenced this whole group of designs.

Perhaps the sleepy soberness of the 1950s affected even civic imagination. but the second period of building abruptly ended and no more ice palaces were built for 28 years. Then in 1975, St. Paul architect and ice palace enthusiast-without-equal, Robert A. Olsen, designed and supervised the construction of a modest one on St. Paul's Harriet Island. The ice for this broadly interpreted medieval castle cost \$10 per block, including labor. Ice for the first palace, in 1886, cost 26¢ per block; 20,000 blocks and 106 laborers were involved. If one figured an average 8% inflation rate since 1975, a 20,000 block palace would cost \$381,068 in 1983obviously the most potent reason for the demise of the crystal castles. Increased costs are directly related to the scarcity of skilled ice cutters and handlers and the fact that in this age of refrigeration, oversized blocks of clear blue-green ice must be custom manufactured.

Bob Olsen's castle was followed, in 1976, by the last ice palace, a boldly abstract composition designed by Craig Rafferty and Jerry Zuber. No other palace was built after it, and probably none will ever be built again. Ice palaces and crystal castles are ephemeral magic fantasies that this myth- and ritualstarved world cannot afford. How doubly impoverished we are and how much more we cherish the memory of what we once had.

Kate Johnson is Chairman of the Education Division at the Minneapolis Institute of Arts.

Special thanks to Robert A. Olsen for research.





the idea of NORTH

The northern cap of the world is less a geographic certitude than an unmapped region of the mind. To invade this vast and somber abstraction, one must move from somewhere specific to nowhere in particular. From the manageable to the mysterious. From the malleable to the immutable.

As a philosophical idea, going north has long captured the imagination of many who live on the rim of the Arctic. Few, however, have speculated on the meaning of north with greater zest than did the late great Canadian pianistcomposer Glenn Gould. When he died of a stroke last October at the age of 50, Gould was best known to American music savants for his mastery of Bach's "Goldberg Variations," and for what the writer Joseph Roddy has termed "his austere attitude toward austere music." Never happy as a concert performer, he made fewer and fewer public appearances in recent years. Always fretful over the strictures of making records, he spent less and less time in the recording studio. Increasingly, he retreated to a cabin in the north woods where he could "concentrate solely," in Roddy's words, "on matching the Bach that bounds off the sounding

board with the ideal Bach he hears in his head."

It is therefore not surprising that a person of Gould's rigorous cast of mind and solitary persuasion should occupy himself with, among other abstractions, "the idea of north." In early childhood he pored over maps of the Arctic, always having trouble remembering whether Great Bear or Great Slave was farther north. He soon began to study aerial photographs and examine geological surveys. And he finally made "a few tentative forays" into the north.

Gould later recalled, "When I went to the north, I had no intention of writing about it, or of referring to it, in anything that I wrote. And yet, almost despite myself, I began to draw all sorts of metaphorical allusions based on what was really a very limited knowledge of the country and a very casual exposure to it. I found myself writing musical critiques, for instance, in which the north—the idea of the north—began to serve as a foil for other ideas and values that seemed to me depressingly urban-oriented and spiritually limited thereby."

Freely conceding that his metaphor-

ical manipulation of the north was suspect if not downright romantic, Gould nevertheless gained comfort from the fact that he was not alone in his poetic perspective. "There are very few people," he wrote, "who make contact with the north and emerge entirely unscathed. Something really does happen to most people who go into the north—they become at least aware of the creative opportunity which the country represents and, quite often I think, come to measure their own work and life against that rather staggering creative possibility—they become, in effect, philosophers."

At length, Gould was commissioned by the Canadian government to produce a special broadcast in which his lyrical affinity for the frozen beyond would be publicly expressed. The project, inevitably titled *The Idea of North*, was first broadcast in December of 1967 as part of a Canadian centennial "Idea" series. It was later adapted for film and also made into an LP record. (*AM*'s captions for Stuart Klipper's photographs are drawn from this record.)

The Idea of North is the remarkable evocation of an extraordinary mind. To convey the experience of living in the



Engaging both the eye and the mind, two artists—musician Glenn Gould and photographer Stuart Klipper—here consider the allure of the Arctic

northernmost one-third of his country, Gould invited five veterans of the north to tell of their life and work there. "We wanted an enthusiast, a cynic, a government budget-watcher, as well as someone who could represent that limitless expectation and limitless capacity for disillusionment which inevitably affects the questing spirit of those who go north seeking their future," Gould later explained.

Actually, The Idea of North is less a story than an opera. For Gould combined narrative impressions, sound effects and the last movement of Sibelius' Fifth Symphony to create what he enjoyed calling "contrapuntal radio." In listening to the record, we hear the clickety-clack of a train at an early point: we are vicariously heading north on the "Muskeg Express," an actual train that runs 1,500 miles north from Winnipeg to Churchill, in northern Manitoba. We overhear four conversations, as well as the clinking of glasses and silver, all at once in the dining car. These are the words and music of a musical composition, with the listener's role "not unlike that of a diningcar steward intent upon giving equal service to all."

While his art and intellect are still remembered, let us honor the genius of Glenn Gould. And not merely because, at the age of 28, he was so good an artist as to prompt an indubitably mature and full-of-himself Artur Rubenstein to confess, "I, Rubenstein, am not yet 40. Glenn Gould is already 65." Rather, let us praise the higher genius in this solitary soul who died too soon. For his was a genius that caused art to embrace life in a most ingratiating way. To wit:

"In one sense, I suppose the train's basso-continuo is simply an excuse a foundation for the vocal textures we wanted to concoct above it. But then, *The Idea of North* is itself an excuse an opportunity to examine that condition of solitude which is neither exclusive to the north nor the prerogative of those who go north but which does, perhaps, appear, with all its ramifications, a bit more clearly to those who have made, if only in their imagination, the journey north."

-William Houseman

Pack Ice, Arctic Ocean, 80°10'N-13°E



Photographer Stuart Klipper went North three years ago not only to take pictures but also, as he puts it, "to see new places, look at the ocean a lot, look at the horizon a lot, and to get to more places than the Vikings did." Armed with a Bush Foundation fellowship, he joined an "expeditionary cruise" on a ship operated by the Society Expeditions named M/S World Discoverer. The ship departed from Edinburgh and headed north. And judging from Klipper's recitation, the cruise outdid the Vikings. Points visited and photographed included the Shetlands, Orkneys and Faroes, Bear Island "on an atypically sunny and un-fogged day," the Lofoton Islands. Though Klipper and company entered the Arctic Icepack north of Spitzbergen and east of Greenland, he regrets having missed Scorsbysund, East Greenland. "The pack," he explains, "was 120 miles thick." Their northernmost lati-tude: 80°15'.

Klipper's Arctic work, from which the extraordinary photographs on these pages were drawn, is titled, "Most North." Two subtitles were borrowed from Heidigger: "The Nothingness of Nothing Is Being," and "Time Is the Horizon of Being."



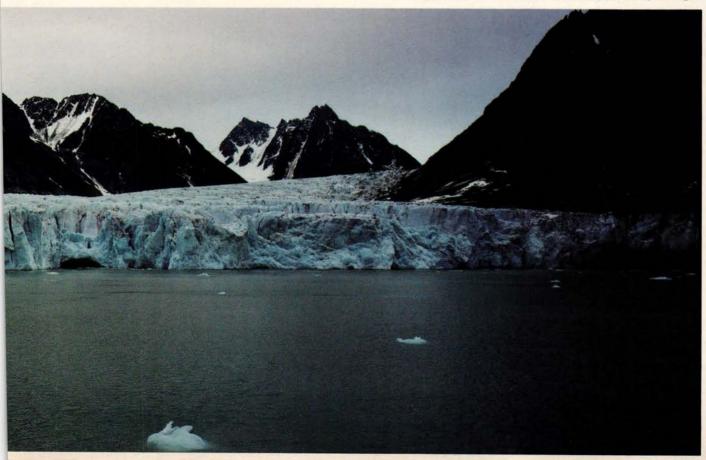
"We travel from the known to the unknown."

"I can't conceive of being untouched by the North."





Magdalenefjorden, Spitzbergen, 79°55'N-10°50'E



Waggonwaybreen Glacier, Magdalenefjorden, Spitzbergen



"A sense of community means life or death. The North cares so little."

"Our number one enemy is not mother nature but human nature."





Norwegian-British Research Station, world's northernmost human habitation. Spitzbergen, 78°55'N-11°55'E



Midnatsolen, Barents Sea, 77°N-18°E

CLOSE ASSOCIATES

Always a distinguished partnership, Elizabeth and Winston Close pioneered modern architecture in the Upper Midwest

By Linda Mack

When Elizabeth and Winston Close opened their architectural office in 1938, no more than five modern houses could be counted among the thousands of Twin Cities residences. Of the five, Frank Lloyd Wright had designed three. The firm of Close Associates, Inc. stepped into that architecturally conservative landscape and successfully rooted modern architecture.

The steady hand of Elizabeth Close, co-principal and newly elected President of the Minnesota Society American Institute of Architects, has steered Close Associates through political and architectural winds toward one goal; designing rational buildings for living and working. Elizabeth and Winston founded their firm to design modern architecture and modern architecture only. That they have succeeded was recognized by their peers in 1969 with their joint election to the College of Fellows of the American Institute of Architects. They have designed hospitals, research institutes, offices, schools, and over a hundred homes in Indiana, Connecticut, Virginia, Idaho and Canada as well as the Midwest. All have the clean lines, natural materials, and re-spect for site which speak well of modern architecture in Minnesota.

The Close association began at the Massachusetts Institute of Technology graduate program in architecture. Winston hailed from the University of Minnesota, Elizabeth from her native Vienna, where the violence of the 1930s had doused the intellectual excitement of the '20s. "Once here I couldn't stand to go back," recalls Elizabeth. "The school was so much better, the atmosphere so open. While Harvard was still drawing the classical orders, M.I.T. was thoroughly engaged with the Bauhaus. When I finished, I was determined to do modern architecture."

Only three firms in the country were designing modern buildings: Richard Neutra in California, and William Lescaze and Oskar Stonorov in Philadelphia. Stonorov hired the young Elizabeth Scheu and she began work on the first public housing project in the U.S. Winston had returned to Minneapolis after M.I.T. and a year later, suggested Elizabeth for an opening at Magney and Tusler. Together they worked on Sumner-Field, Minnesota's first public housing project. In 1938 their professional and personal association became official when they opened a firm and three months later married.

It was a tough time to start a practice, particularly one devoted exclusively to modern architecture. "We had low expectations," Elizabeth says. "Our first office had room for two desks, if you arranged them right. Our very first effort was a cooperative housing venture, involving some university people. But in those days rowhouses sounded like Baltimore. We jokingly labeled it Trotsky Heights." The cooperative lacked only \$5000 to begin.

Foiled in their cooperative efforts, several prospective buyers decided to build individually and chose the Closes as architects. The very first commission, the Faulkner House at 252 Bedford Street S.E., attracted other clients and the Closes began a steady career of custom house design.

War interrupted. Winston joined the Navy, while Elizabeth designed pre-fab housing for a Shakopee firm. When they reopened Close Associates in 1946, the commissions began to flow again. In 1950 Winston joined the architectural staff of the University of Minnesota, where he developed the university's Duluth campus plan and guided the growth of the West Bank campus. The students who cross the two-level Washington Avenue Bridge with its enclosed pedestrian walkway can thank Winston for its design. For Close Associates, Winston played an essential role as critic and supporter. As he notes, "I always had a desk.

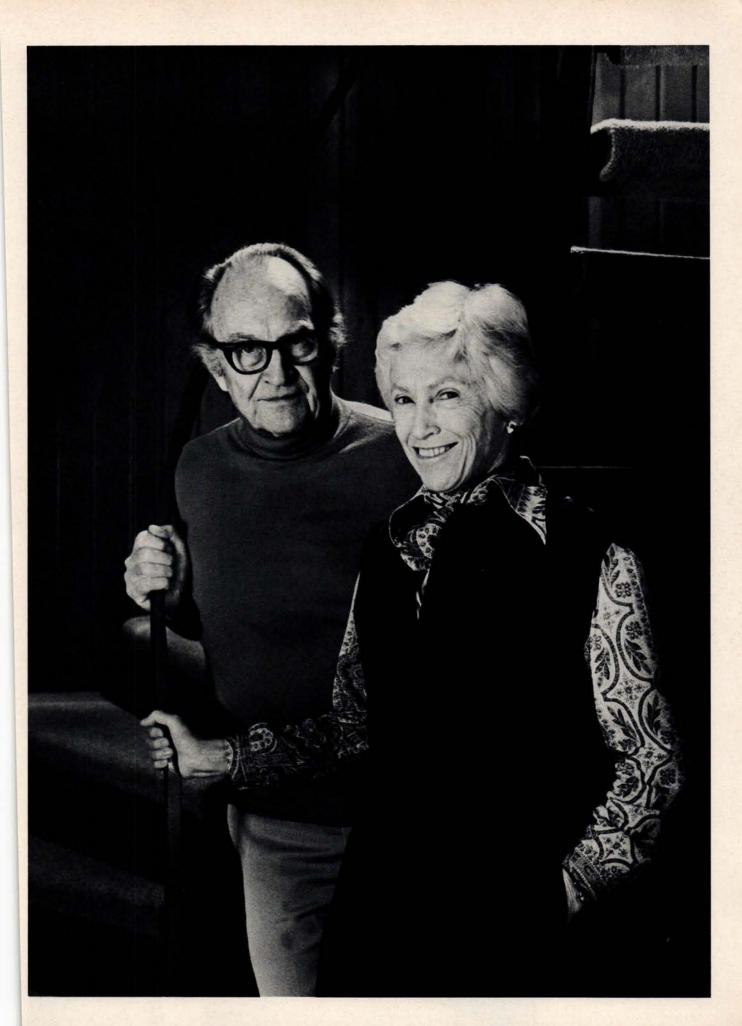
Elizabeth, meanwhile, continued to build the firm's reputation as a designer of natural, ordered, contemporary homes. The Close commissions read like a list of the Twin Cities elite: Wallace and Bruce Dayton, Frank Heffelfinger, Walter Heller, Stanley Hubbard. These and other social and intellectual leaders preferred the progressivism of modern architecture to the pretentions of pseudo-styles.

"I like designing houses because each one is different," says Elizabeth. "We like getting to know people and thoroughly understanding their needs. The program, the site, the budget are always different. No two houses we've built are really even similar."

Certain elements recur, however. Natural materials are used to reduce maintenance and to integrate a house in its setting. Indeed, unpainted redwood or cedar could form a Close trademark. Attention to siting is paramount. Close designs blend into the environment, be it a lakeside setting or older residential neighborhood. They do not echo nearby architecture, but are so soft-spoken that they fit anywhere. And concern for acoustics is constant. "Most architects forget about it," Elizabeth states. "It's important not just in performance spaces but in living and working spaces. We think about it because we play chamber music. When we design a house we always make room for a grand piano-just in case." And behind every house design is the conviction that the house is built for the user, not the architect. "It's very personal. The owners have their opinions and ideas. You don't always get award winners, though some have been, but our first aim is to satisfy the users.'

Though the Closes are best known for their private homes, they've designed a wide range of projects. Their public housing work has been nationally recognized. They've designed medical facilities ranging in size from the small Interstate Clinic in Red Wing to the Metropolitan Medical Center, remodeled jointly with Horty-Elving in 1969. Research institutes, law offices, earth-sheltered townhouses-all reflect the Close philosophy. Says Elizabeth, with the conviction of a successful career, "I like things to be rational. Dramatic, if possible, but not necessarily. The prime objective is to provide a background for work, for living, for reflection.

Elizabeth and Winston Close. Elizabeth is the newly elected President of the MSAIA.



GRAY FRESHWATER BIOLOGICAL INSTITUTE

It was the right project at precisely the right time. The Closes had just finished the Peavey Technical Center, a research fa-cility of similar size, when a friend and client named Richard Gray asked them to do preliminary design work for a freshwater research laboratory. Involved every step of the way, the **Closes helped pick an ad**mirable site on Lake Minnetonka. Freshwater which won a 1978 MSAIA Honor Award, is an angled series of pavilions. It houses labs for resident and visiting scientists, at-tendant utilities, offices and seminar rooms. A poured-in-place concrete frame was specified for its resistance to vibration, and the exterior is clad in gray-pink brick and roughsawn wood (top). The li-brary (right) is centrally located and accessible from both levels. Like the offices, study alcoves and conference rooms, it en-joys natural light and a vista of the marshy inlet. Dialogue areas (below) en-courage interchange be-tween scientists. Color-coding of labs makes func-

cooling of labs makes func-tions clear to both workers and visitors. "It's beautiful and func-tional," says Freshwater President Gray. "It was built on the fast-track, but after seven years of operaafter seven years of opera-tion, I can think of no major changes we would make. It's a non-problem place."



Photographs: Soari and Forrai





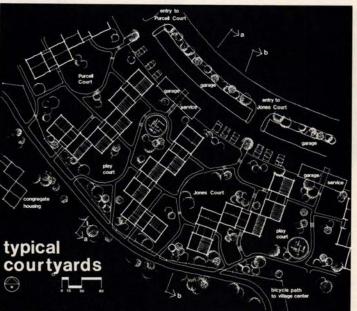


WINDSLOPE

Like the Freshwater Institute, this multi-family housing project demonstrates the Closes' socially responsive approach to architecture. Windslope was developed in 1979 by the Minnesota Society of Architects to show that middle-income, moderate density housing could fit into single family neighborhoods. The 168 dwelling units are clustered to provide both privacy and community on a ten-acre Eden Prairie site. The frame buildings step down a crescent-shaped hill to define south-facing yards and give all units a distant view. Parking garages at access roads keep living areas traffic free.

UNIVERSITY OF MINNESOTA MUSIC BUILDING

Music and architecture meld in the Closes' most recent commission, the proposed U. of M. Music Building. Its low profile and red-gray brick will tie it to both the riverbluff and existing West Bank buildings. On the facade, a caststone screen projects a musical pattern and leads to the higher lobby entrance. Decks and plazas invite outdoor music performances.









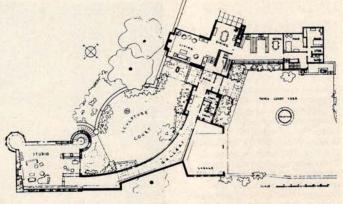
otoaraphs: Hedrich-Blessi

In their houses, the Closes aim to elaborate on the client's personal values

ROOD HOUSE

Built on an acre of Minneapolis' Mt. Curve Ave. in 1948, Rood House remains a contemporary classic sensitively sited in a prestigious old neighborhood. A paved courtyard leads to an entryway designed to display sculptor John Rood's work. To the right, living areas overlook downtown Minneapolis. To the left, a curved glass gallery and outdoor sculpture court pull visitors to the studio. The studio's round towers rise on the foundations of the former estate's carriage house. The original curved stone walls inspired the design.



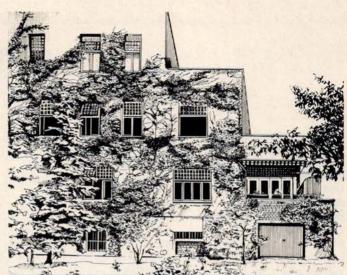




SKYWATER

This 1941 cabin is as natural as the woods around it. As you approach from behind, it is almost invisibly tucked into a hill above the St. Croix. On the river side, a clean expanse of glass makes the vista a wall of woods and river. The cabin's brick and wood interior is equally organic. In the European tradition, the Closes designed chairs, tables, even outdoor furniture specially for the cabin.





Liking modern came easily in a Loosdesigned house

The house set Vienna on its ear. Designed by Adolf Loos in 1912, Elizabeth Scheu Close's childhood home was as much a polemical statement about modern architecture as it was a family dwelling. Its perfectly plain facade mocked the Viennese baroque and seemed to call for a new order, even before war had destroyed the old.

Elizabeth Scheu's parents, "defenders of modern art in all its forms,' worshipped Loos as both a spokesman and a practitioner of modernism. We had a bust of Loos for our living room," Elizabeth re-calls. "Win and I used to joke about genuflecting when we entered." Elizabeth's mother was a writer and publisher of children's books. Her father, a lawyer, served as the alderman responsible for Vienna's first public housing program. Both Social Democrats, they were im-mersed in the intellectual hotbed of 1920s Vienna. At Haus Scheu, artists, writers and musicians-Schoenberg and Berg among them-mingled with foreign students or visitors such as Richard Neutra.

It was this milieu that nurtured Elizabeth's development as an architect. "Architecture was very important in Vienna and particularly in our household. The design of our house was the subject of a lot of controversy. And I loved drawing, color, planning and paper. I guess I was predisposed to architecture." And to modern architecture at that. Loos, who is famous for his essay on ornament as sin, was a particular influence. "I'm sure he informed my view that you should not use meaningless ornament," says Elizabeth. "I hate stuff plastered on. I like things to be rational."

The Viennese heritage also extends to Elizabeth's avocation as a musician. Her grandfather was a composer and her father an avid amateur musician, interested in Mahler, Berg and Schoenberg. Elizabeth and Winston play chamber music together and have commissioned compositions. Elizabeth was a charter member of the Minneapolis Civic Orchestra.

The Close's three children have embraced the strong cultural traditions of their parents. Daughter Anne teaches German. Son Roy is the music critic for the St. Paul *Pioneer Dispatch*. Robert, a landscape architect, recently collaborated with the firm on the remodeling of Tuttle School.

Though Elizabeth has combined family and career, she is hardly an ardent feminist. "I'm an architect who happens to be a woman," she says. "Professional women have a more complicated problem at a certain stage in their lives. A supportive husband is essential, as is help with house and children."

Ellerbe Associates, Inc. **Project: James** Whitcomb Riley **Hospital for Children Indiana University Medical Center** Indianapolis, Indiana

History and tradition are highly important and valued ingredients in the personality and character of Riley Hospital. It was recognized early in the design process that the

Arvid Elness Architects Project: Creek Ridge Office Building Bloomington, MN

Located between W. 78th St. and 494, Creek Ridge is a 30,000 sq. ft. office building over three floors. Nine Mile Creek runs diagonally through the site providing a natural point of focus for the building's orientation. The building is sited on the ridge

Lilyholm, Young & Gleeson **Project: Market Place** St. Paul, Minnesota

An exciting new renovation in St. Paul's Lowertown, currently in the design phase, will include loft-style condominiums and 26,000 square feet of retail space in a turn of the century six-story warehouse building.

Lilyholm, Young & Glee-

Baker Associates, Inc. Architects, A.I.A. Project: Nicollet Plaza Minneapolis, MN

Nicollet Plaza is a mixed use development proposed by Architect and Developer Edward Baker for Downtown Minneapolis on the Mall at 6th Street. The project consists of a 42-story office tower of over 750,000 square feet which includes retail space

older Riley buildings contained those elements of color, texture, and scale appropriate to the warmth and personalization expressed in the "design criteria."

The scale of the older Riley buildings and their courtyards give the first clue to the massing of the proposed new construction. (612) 853-2000

son, designers of several

ovation projects in recent

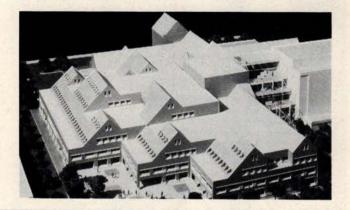
years, were selected to develop this space to compli-

ment the adjacent new location of the St. Paul Farmer's Market. The post and beam

interior will be retained with

tail shops to the rooftop sky-

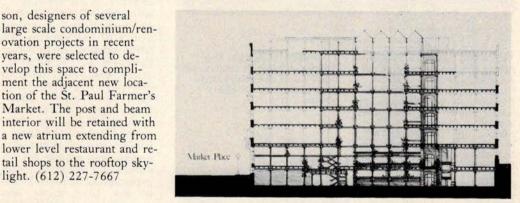
light. (612) 227-7667





overlooking the creek and the tree line and attempts to place the office space "into" the natural setting.

The parallelogram-shaped building has a flush face to the creek side and a stepped face to the entry side. The flush face captures the view out onto the creek while the stepped facade acts as a sun screen to the office space to the southwest. (612) 339-5508





and a 440-room hotel apartment tower, both rising from a four-story retail and commercial space base, with res-taurants and bars. Retail shops will be provided along the Mall retaining the traditional shopping street.

The commercial floors will open to an enclosed multilevel public plaza with skyway connections across Sixth Street to the City Center, across the Mall to Penneys

Department Store and through the Chamber of Commerce Building to the skyway across 5th Street to the Lumber Exchange Building. Parking will be pro-vided off 6th Street on two levels below grade.

The exterior skin of the two towers will be reflective glass and clear glass at the lower four floors. (612) 339-8601

Zuber Sirny Baker Stebbins Architects Project: Afton Court Townhomes St. Paul, Minnesota

As part of a unique competition for an H.R.A. townhome site, the City of St. Paul allowed the surrounding neighborhood to select the project/developer. The winning design includes energy efficiency, custom design fea-

Ellerbe Associates, Inc. **Project: Hennepin County Juvenile Justice** Center

Minneapolis, MN

The proposed new Juvenile Justice Center provides facili-ties for two distinct criminal justice functions: (1) courts and court services and (2) detention. Although these functions are mutually dependent, each has clearly identifiable

Meyer, Scherer & Rockcastle, Ltd. **Project: DATATEXT** Systems, Inc. Minneapolis, MN

DATATEXT Systems Inc. has commissioned the Minneapolis firm of Meyer, Scherer & Rockcastle to program, plan and complete the interior design and space planning for their new corporate headquarters. The design ac-

Architectural Alliance **Project: Medtronic Business** and Technology Center Fridley, Minnesota

Architectural Alliance provided programming, building design, landscape and interior design for this facility, which uses a 170 foot skyway to connect a 20,000 square foot cafeteria/training center addition to an existing facility tures, and extensive landscap-

ing. The fifteen townhomes will consist of three plus bedrooms with attached garages. Permanent mortgages will be handled through the Minne-apolis/St. Paul Family Housing Fund and conventional programs. (612) 884-6204



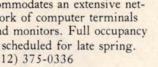


spatial and structural requirements. The design solution responds to these concerns by dividing the functions into two distinct but related buildings.

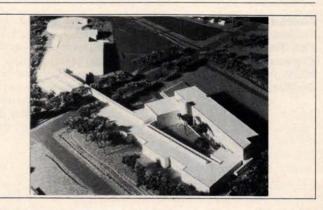
The courts and offices are located in a rectangular threestory structure permitting direct access from street level while the detention building, linked to the courts building via a skyway, takes the form of a triangle. (612) 853-2000



commodates an extensive network of computer terminals and monitors. Full occupancy is scheduled for late spring. (612) 375-0336



and a new 256,000 square foot office and laboratory building. A courtyard provides a quiet relaxation area for employees and an interior focus for the new site. Occupancy is being phased and is currently underway. (612) 871-5703



coming soon coming soon coming soon coming soon

Lilyholm, Young & Gleeson Project: Energy Center Building in Energy Park St. Paul, Minnesota

This building takes the standard format of the office manufacturing warehouse development and uses a free plan form to make an exciting and interesting energy-conscious building complex. The devel-

Patch, Erickson, Madson, Watten, Inc. Project: Augustana Home Minneapolis, MN.

Augustana Home has been a dominant influence in comprehensive care for the elderly in Minnesota and is located in the revitalized Elliot Park neighborhood of Minneapolis.

The addition to the exist-

Frederick Bentz/Milo Thompson/Robert Rietow, Inc. Project: Elliot Park Neighborhood Recreation Center Minneapolis, MN

A major addition and remodeling will transform the existing park shelter to a completely new and handicapped accessible recreation center. (612) 332-1234

Ellerbe Associates, Inc. Project: James Ford Bell Technical Center Expansion; General Mills, Inc. Golden Valley, MN

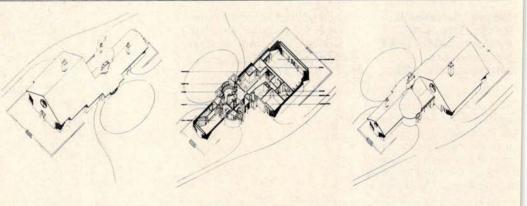
The 70,000 square foot laboratory and office expansion is the first phase of the master plan which will ultimately double the size of the existing 325,000 square foot facility. opment is the core of the very ambitious St. Paul Energy Park and its adjacent neighbors will be projects by Control Data and The Wilder Foundation.

A design review conference assures that the developments will be compatible and fulfill the high ideals set by the covenants. (612) 227-7667





ing facility is composed of two residential towers of 7 and 13 stories containing 230 one and two bedroom apartments. An interconnecting, two-level atrium space will contain commercial and private facilities necessary to support activities and needs of the residents. The towers will be connected by skyway to the existing nursing health care complex. (612) 374-3490



The expansion locates open office functions and the cafeteria within the south-facing, serpentine, reflective glass wall. A skylit concourse provides the connection between the new visitors' entry and the administrative offices in existing building. (612) 853-2000



BRW Architects, Inc. Project: Amhoist Building/Park Tower Condominiums St. Paul, Minnesota

By the autumn of 1983, this 28-story mixed use development will be a dominant feature in the skyline of St. Paul. The tower will contain 140,000 square feet of parking, 222,000 square feet of office condominiums and

Ellerbe Associates, Inc. Project: School of Public & Environmental Affairs (SPEA) Indiana University Bloomington, Indiana

The first new school within the Indiana University system in 50 years desired an image and environment responding to their concerns for energy conservation, and at the same 81,000 square feet of residential condominiums.

The post-tensioned concrete structure will be sheathed in reflective glass with aluminum panels to express the columns. Pre-finished metal louvers will screen the parking.

ing. The design respects the rich historic character of the Rice Park District. The project is currently under construction. (612) 379-7878

time giving them a highly visible image within the campus. (612) 853-2000





Bruce Knutson Architects, Inc. Project: Lake Shore Drive Condominiums Richfield, Minnesota

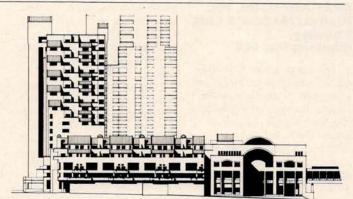
Construction of the 178unit Lake Shore Drive Condominium project is underway. The 11 story project is a major step toward the renewal of the Lyndale-Hub-Nicollet area in the city of Richfield.

Miller Hanson Westerbeck Bell Architects Inc Riverplace: Block 1 Minneapolis, MN

This multi-use project is to be located on the East Bank of the Mississippi River and will become a part of the historic old Main Street of Minneapolis. The development will include a 520 stall parking ramp, 165 rental



The project has been designed for the older adult desiring a housing alternative which offers independence, security and support while allowing continued ownership. In addition to the living units, there will be two guest rooms, a large social/dining room, conference rooms, exercise, work, game and hobby rooms, and a tenant party room. (612) 874-7050



coming Soon announcements are placed by the firms listed. For rate information call AM at 612/874-8771.

apartments, in a 27-story

tower, 80 Condominiums in

a 20-story mid-rise, 9 two-

story Townhouses and a 4-

A skyway across Hennepin Avenue will link this project

story office building.

to a 5-story Commercial

office building also designed

by Miller Hanson Wester-

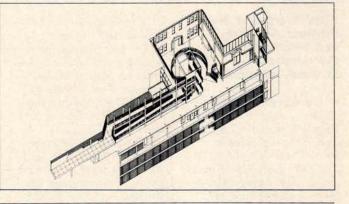
beck Bell Architects Inc.

(612) 338-7700

Architectural Alliance Project: Vocational Technical Education Facility St. Paul, Minnesota

Recently occupied, this 100,000 square foot facility on the University of Minnesota Campus uses an interior courtyard to connect a remodeled livestock pavilion to a new addition. (612) 871-5703





The Leonard Parker Associates Project: New York Law School New York, New York

The Leonard Parker Associates have completed designs for an addition and major remodeling of the New York Law School, currently housed in three 1920–30's buildings.

The design solves the

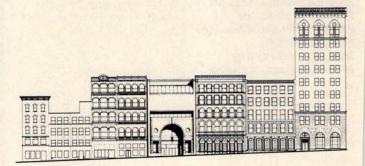
Smiley Glotter Associates Project: 1221 Nicollet Mall Office Building Minneapolis, Minnesota

1221 Nicollet Mall is a prestigious retail/office building to be prominently located at the terminus of the Loring Park Greenway at the Nicollet Mall. The triangular shape of the building compliments and directs the inter-

Close Associates, Inc. Project: Moderate Cost Housing Minneapolis, MN

The Powderhorn Community Council has embarked on a program to develop moderate cost housing on available sites within their neighborhood. The first project at 36th Street and Chicago Avenue replaces an abandoned filling station with five townproblems of circulation, organization and image posed by the existing buildings. Circulation will be directed along an interior "street" linking the existing buildings and addition. Classrooms, offices and library are to be located around an interior atrium providing a central focus for the school.

Project associates are Carson Lundin & Thorson. (612) 871-6864

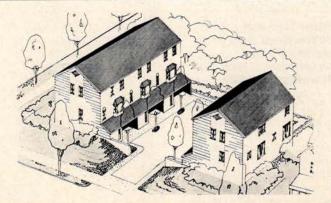




section while maximizing pedestrian exposure and access. The shape also helps preserve visual openness for adjacent Westminster Presbyterian Church. The smooth, reflective quality of the building surface mirrors the textured stone of the church and serves as a counterpoint to its form. (612) 332-1401

house units accessible from a semi-private motor court.

The scale, elevated lawn, and characteristic gable forms of the neighborhood are retained, but with no need for the typical entrance walk and hazardous exterior stairs. The arrangement provides a variation and enhancement of the urban scene, yet is readily assimilated within the existing community. (612) 339-0979



Frederick Bentz/Milo Thompson/Robert **Rietow**, Inc. **Project: Summit Bluff** Townhomes St. Paul, Minnesota

Seven Townhouses at 378 Summit Avenue will replace a 22-room mansion which was demolished in 1957.

Ranging in size from 2,500 to 3,350 sq. ft., the new houses are arranged in

ARVID ELNESS ARCHITECTS, INC. **Project: South Haven** Apartments Edina, Minnesota

South Haven is a 100 unit elderly housing project for low and moderate income users under the H.U.D. 202 program. The siting and form of the building minimizes north facing units. The seven story structure has

Architectural Alliance **Project: Prudential** Refurbishing Minneapolis, MN

Architectural Alliance's interior design and architectural team began work on this refurbishing of Prudential's North Central Headquarters Office Facility in early 1981. (612) 871-5703

Klapste Goltz Associates, Inc.: Architects L. K. Mahal and **Associates:** Project Developers Project: Office, Commercial, and **Parking Structure** Minnetonka, MN

Spectacular vistas will be offered by this 46,800 sq. ft. four-level office and commertwo sets, four houses fronting on Summit Ave and three houses fronting on Western Ave. All consist of three stories plus loft.

The design has attempted to integrate the houses in large masses to affect the scale of the adjacent existing houses which are extraordinarily large. At the same time, the design has tried to give each house separate identity. (612) 332-1234

poured concrete walls and

The sponsors and devel-

in alliance with the Commu-

nity Development Corpora-

tion of the Archdiocese of

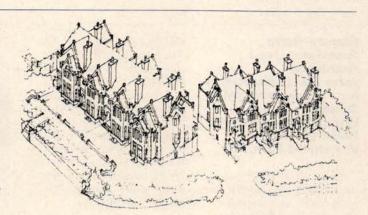
Minneapolis and St. Paul.

The building will be ready

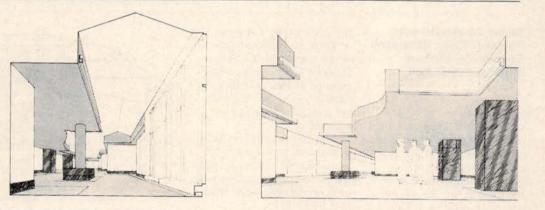
for occupancy January 1,

1983. (612) 339-5508

neer.









Coming Soon announcements are placed by the firms listed. For rate information call AM at 612/874-8771

cial structure which occupies some of the highest terrain in Hennepin County.

The building is a compact, energy and material efficient design of brick and glass set on a concrete plaza enclosing underground parking. It is the first of four mixed-use buildings in an eight acre master plan adjacent to Ridgedale. (612) 332-8901

Klapste Goltz Associates, Inc.: Architects John Weidt Associates, Inc.: Environmental Design Project: Wooden Shoe Factory Woodland Park, CO

This 10,000 sq. ft. solarpowered wooden shoe factory, retail outlet, and corporate office for Wasa Clogs, Inc.

Close Associates, Inc. Project: Ronald McDonald House, Phase II Minneapolis, MN

Children's Oncology Services, Upper Midwest, owner of the Ronald Mc-Donald House, is about to begin construction of a ten bedroom addition to the original house (1981 CUE Award Winner) which was

Team 70 Architects Project: Cray Research Corporate Offices Minneapolis, MN

Cray Research, Inc., is a leading designer of largescale scientific computers used world-wide by business and government. We redesigned a traditional 1960s office space in the former Pillsbury Building to suit the innovative work patterns of Cray's will be a focal building for Morningsun, a new "solar community" in the Colorado foothills.

A rustic wood structure and wood exterior reflect the mountainous setting and the company product. Daylighting and passive solar heating, the primary form generators, are expected to reduce "standard" utility costs by 60%. (612) 332-8901

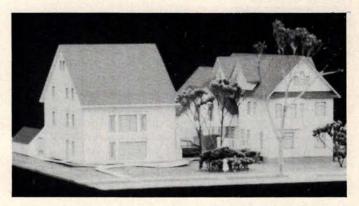


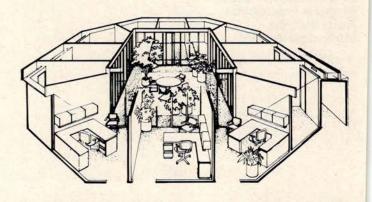
finished in the Fall of 1980. The addition will provide overnight housing for ten more families of children with cancer. It will complete the existing complex by adding a large outbuilding/dormitory at the north end of the existing porte-co-chere.

The addition is a simple building set back on the property so as not to compete with the established image of the House. (612) 339-0979

high technology business. Team 70 clustered divisional management offices to facilitate Cray's group work process. Individual offices have complete privacy and yet are easily accessible to each other.

The executive offices are grouped in pods around "interior parks," natural habitats which serve as casual meeting or formal group work areas. (612) 332-5515





tail mall.

will feature a multi-level re-

include: condominium and

restaurants, shops, several

movie theaters and an old

world open food market. In

addition the new Downtown

St. Paul YMCA will be lo-

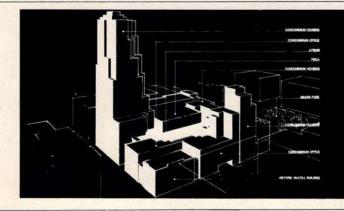
cated here. (612) 338-7700

rental housing, condominium office space, underground parking facilities as well as

Plans for the development

Miller Hanson Westerbeck Bell Architects Inc Lowertown: Block 40 St. Paul, Minnesota

As part of historic Lowertown, this multi-use development will be the key component in the revitalization of this area of downtown St. Paul. The block will be linked by three skyways to surrounding buildings and



Korsunsky Krank Erickson Architects, Inc. Project: First Bank LaCrosse LaCrosse, WI

Construction will begin in September on a ten-story, 125,000 square foot bank and office tower in downtown LaCrosse, Wisconsin. The project, sheathed in Kasota Limestone and bronze glass, will be the tallest in La-

The Leonard Parker Associates Project: Macalester College Pool St. Paul, Minnesota

TLPA is working with Macalester College on a long range plan to upgrade older campus buildings. The first project is an extensive renovation of the Gymnasium including an addition housing a

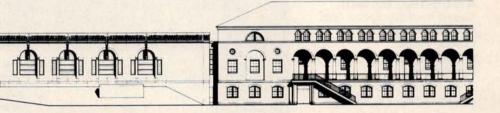
InterDesign Inc. Project: Fridley City Civic Center Fridley, MN

The city of Fridley recently held an invited competition between a selected list of design firms for their proposed City Civic Project. The InterDesign Inc. solution was selected as the basis of future development. Roger

Eldon Morrison Architects/Inc. Project: Lakewood Village Condominiums White Bear Lake, MN

Construction of the 42-unit Phase I of Lakewood Village Condominiums is expected to be completed by October 1, 1982. The complex includes one to three bedroom units in a variety of plan arrangements, underground parking, Crosse. The tower is skewed from the street grid to open up a large entry plaza and a sunken courtyard at the intersection of Main and Second Streets. Other features include a three-story atrium, drive-up banking facilities and a possible future skyway connection to structure parking. 612/339-4200





25 meter competitive and recreational swimming pool. The exterior of the pool addition is designed to blend

Martin, Landscape Architect, was the Partner-in-Charge of the project.

The concept utilized a large participatory sundial mosaic on a major berm to serve as a focal point for community events. It also recommended a natural, freeform, prairie, pedestrian and bicycle greenway to link the civic space to the rest of the community. (612) 871-7979

balconies, and top floor vaulted ceilings with clerestory windows.

Community amenities nearby include a golf course, YMCA, shopping centers, and immediate freeway access.

This phase, by the Bruggeman Companies, will be followed by two more similar buildings on an adjacent site. (612) 426-3287 with the architecture of existing campus buildings. The structural system is gluelaminated wood girders and deck on masonry bearing walls. Construction is expected to begin this summer. (612) 871-6864

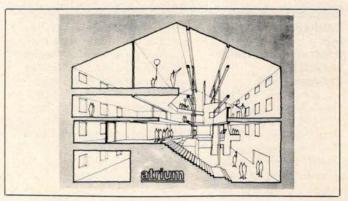




Mark McKechnie, Architect Project: The Old Pottery Red Wing, MN

Work has recently begun on a major renovation project in the city of Red Wing. The building, erected in 1904, once housed the Red Wing Pottery factory. The historic landmark is being recycled into a multi-use center. It will have two floors of factory outlet stores, two restaurants, a professional office center and 17 duplex condominiums.

The rehabilitation will create a new 4 story atrium through the center of the building and contain 100,000 square feet of space for the new uses. (612) 388-6382



Armstrong, Torseth, Skold and Rydeen, Inc. Project: North Wirth Office Park Golden Valley, Minnesota

This complex of three office buildings and a parking ramp will house the corporate headquarters for Graco, Inc., M. A. Mortenson Company, and Alexander and Alexander, Inc. (612) 545-3731

Blumentals/ Architecture, Inc. Project: Solar Townhouses for Dakota County HRA Apple Valley, MN

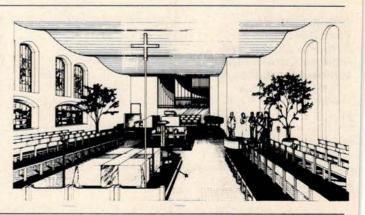
These 15 energyconserving, solar townhouses will start construction in late summer. They are designed with attached garages, southern exposures for living areas, and no windows on the

Sovik Mathre Sathrum Quanbeck Architects Project: Summit United Methodist Church Columbus, Ohio

A completely prosaic, multi-purpose gymnasium/ dining/assembly room with a stage is being converted into a "centrum" for a Methodist parish in Columbus, Ohio. A centrum, as SMSQ denorth. Concrete block party walls provide thermal mass while night insulation for windows, attic vent fans, and an active solar system for domestic hot water contribute to total energy efficiency. (612) 571-5550



fines it, is a place particularly prepared for worship but hospitable to other worthy assemblies also. It is a flexible house for God's people, not an otherwordly house of God. It is not monumental in scale, nor ecclesiastical in style. Its goal is the numinous, attained through the mystery of beauty, the sense of hospitality, and the sense of reality rather than fantasy. (612) 332-8676.



Architectural **Resources**, Inc. **Project: Viking** Amphitheater Park Rapids, MN

The Headwaters Society in conjunction with Architectural Resources, Inc. of Hibbing and Duluth is currently working on Viking!, an epic drama amphitheater. The complex is located on Birch Lake in the Park Rapids area.

BWBR Architects **Project: The Phipps Center for the Arts** Hudson, WI

Overlooking the St. Croix River, in Hudson, Wisconsin, the new Phipps Center for the Arts is nearing completion. The Center will offer a 225-seat auditorium featuring a proscenium stage, orchestra pit, dressing rooms, green room, and a "scene shop" for fabrication of props

Architectural Alliance Project: Prudential Refurbishing Minneapolis, MN

Architectural Alliance's architecture and interior design team began programming and design work in January of 1981 on a four-phase refurbishing of Prudential's Home Office on Wayzata Boulevard in Minneapolis. Phase Two is nearly complete, with the entire project

Korsunsky Krank Erickson Architects, Inc. **Project: Micro** Component Technology, Inc. Shoreview, MN

In conjunction with the celebration of their tenth anniversary, Micro Component Technology, Inc. has recently begun construction on a new World Corporate Headquar-

The complex will contain an entrance pavillion, amphitheater seating over 1600 people, related backstage support functions and public functions, and an actors' village.

The script, written by an Ohio consultant, relates the story surrounding the first contact between the native Santee Dakotah Indians and Viking explorers. The architecture will reflect typical Vi-

and sets. Space will be pro-

vided for the visual arts (in-

cluding a gallery and a sky-

The theatre will have a ra-

dial sloping floor and the lat-

est in creative lighting and

sound techniques. In addi-

tion, the Center will provide

kitchen facilities for commu-

slated for completion in early

1984. The project will include new interior design and

furnishings for most of the 425,000 square foot facility.

(612) 871-5703

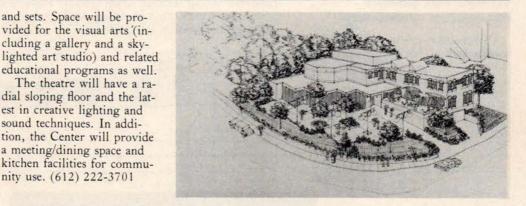
a meeting/dining space and

nity use. (612) 222-3701

king forms while remaining contemporary in its interpretation, employing tensile structures to protect the pub-lic facilities for the amphitheater and the actors' village.

The Headwaters Society is now raising funds to promote this complex which is seen not only as a tourist attraction but also as a cultural outlet for local theater groups such as Bemidji State College. (218) 727-8481

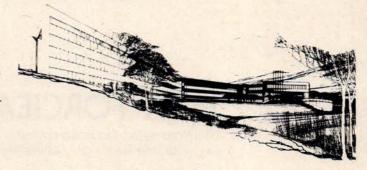






ters in Shoreview, Minnesota.

The 180,000 square foot facility is the first phase of a planned 400,000 square foot complex. Oriented to a naturally wooded lowland on the site, the facility will have administrative offices, development and production spaces. (612) 339-4200



news, notes & opinions

Continued from page 15

finishing materials, landscape design, color schemes and other elements they felt would improve the project.

Development of the Princeton-Cambridge property was financed by Macalester's High Winds Fund and coordinated by urban geography professor David Lanegran. The fund was established by *Reader's Digest* founder DeWitt Wallace in 1956 to maintain the "beauty, serenity and security" of the Macalester College neighborhood. Only a few endowments like it exist in the United States.

According to Lanegran, the Princeton-Cambridge property is now worth about \$1.5 million, up from \$750,000.

Walker Art Center expansion underway

Construction has begun on a 23,000 square foot addition and remodeling to Walker Art Center in Minneapolis to accommodate its expanded program. Two new galleries for the presentation of prints, photographs and other works will be built below grade and adjacent to a new 70-seat lecture room, an openarea art laboratory, a new print study room, and an expanded library. Beneath these spaces will be increased collection storage and shop facilities. An addition to the north will house archives and enlarge the museum book shop; curatorial and administration areas will be enlarged to the south.

The architect for the \$2.9 million expansion is Edward Larrabee Barnes, who designed Walker Art Center's present building. He is working with Minneapolis architectural firm Hammel, Green & Abrahamson, Inc. Construction is scheduled for completion in March 1984.

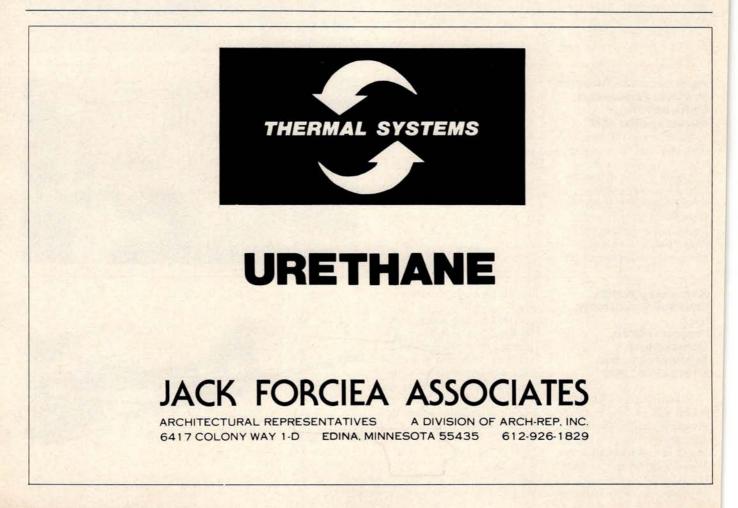
St. Paul firm joint winner in national housing competition

Dean & Davy Architects, St. Paul, is one of four First Award winners in the Lafayette Square Design Competition, a national competition to design infill housing for one of St. Louis, Missouri's, oldest neighborhoods.

The winning designs were selected from among 78 entries by judges Jaquelin Robertson, dean of the School of Architecture at the University of Virginia, Adele Naude Santos, chairman of the Dept. of Architecture at the University of Pennsylvania, and Jerry King, president of City Equity Corporation, the project developer.

The competition program called for 90 to 110 townhouse condominiums to be inserted into an irregular, fourand-one-half acre site adjacent to Lafavette Park, the city's oldest park. According to James Dean of Dean & Davy, the firm's winning entry was guided by a desire to respect and build on the Victorian character of the neighborhood. Their design calls for two-and three-story townhouses with a rusticated concrete base, brick cladding, limestone or concrete lintels and sills, and corner turrets where appropriate on the block. Where they face the street, they will continue the existing line of facades.





The competition was sponsored by the City Equity Company and the Lafayette Square Restoration Committee, a neighborhood group. The purpose was both to gain a design for the competition site and establish prototypes for future development in Lafayette Square and elsewhere in St. Louis.

High speed train considered for Chicago-Milwaukee corridor

A 250-mile-per-hour magnetic levitation train system could link Milwaukee and Chicago by 1991—in time for the 1992 Chicago World's Fair, according to a feasibility study conducted by The Budd Company of Troy, Michigan. The \$40,000 study was commissioned by Wisconsin Congressman Henry S. Reuss, Milwaukee County Executive William F. O'Donnell, and Wisconsin Governor Lee S. Dreyfus. The three levels of government and the Wisconsin Electric Power Company paid for it.

In announcing the findings, Reuss said that the proposed 79-mile "maglev" skytrain could make the Milwaukee to Chicago trip in about 32 minutes with three intermediate stops. Air traffic now clogging Chicago's O'Hare Airport could be diverted to Milwaukee's Mitchell Field, 20 minutes away by sky-

train.

The Budd Company, a designer and manufacturer of passenger rail cars, is the sister company to the developer of the magnetic levitation train system, Thyssen Henschel, of Kassel, West Germany. According to Budd, the "maglev" propulsion system converts electrical energy into motion and has no moving parts. Because the vehicle suspension surrounds the guideway, there is no possibility of derailment, and, unlike aircraft, the system is fully operational in any weather.

The report estimates construction costs of \$1.2 billion in 1982 dollars and preliminary operating costs of \$13 million a year. The Illinois and Wisconsin Departments of Transportation are conducting ridership studies to determine financial feasibility. If feasible, Reuss says, a bi-state authority will be formed to implement the system.

New and upcoming exhibits

"Hedrich-Blessing: Architectural Photography, 1930–1981" is open until March 13 at the University Gallery, U. of Minnesota, Minneapolis campus.

"The Design Decade—The Tradition Continues," an exhibit of 1930s functional and decorative objects (see photo), is on display through March 18 at F&M Marquette National Bank, Sixth and Marquette, Minneapolis.

"Scandinavian Modern: 1880–1980," an exhibit of furniture, glass, ceramics, metal work and textiles, is at Landmark Center, St. Paul, through April 24. It is presented by the Minnesota Museum of Art.

Minneapolis architectural firm Hammel, Green & Abrahamson, is hosting an exhibition of the works of Carl Nyren, one of Sweden's most prominent architects, March 16–April 9 in the HGA Gallery, 1201 Harmon Place.

-E. H.



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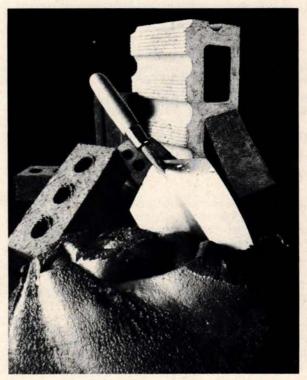
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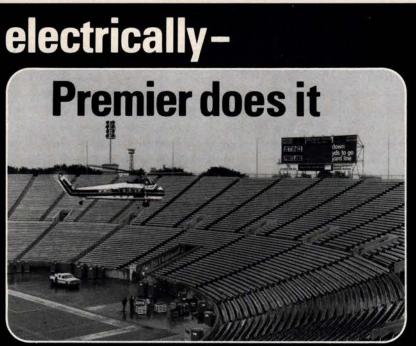
The Kik, one of several Scandinavian-made sleds you ride standing up, is being discovered in this country as a new way to enjoy winter. Invented by the Dutch about 350 years ago to traverse frozen canals, the modern Norwegian-made Kik is a lightweight, laminated hardwood sled with flexible steel runners for balance and steering. It operates best on snowpack or ice rather than powdery snow and can go anywhere cross-country skis can. By pushing off with one foot and keeping the other on a runner, the rider can kick along at a good pace.

These upright sleds are used for transportation as well as recreation in Norway and other Scandinavian countries where roads are not plowed and salted as they are here. Toddlers get strapped into the seat of a Kik instead of a stroller. Elderly people use them as walkers. For others, the upright sled is a winter bicycle for trips to school, to work or to the store. Distributors for the Kik in this coun-

Distributors for the Kik in this country are Chris and Royal Cardon of Middleton, Wisconsin. They sell them by mail order most often to people living in the Northeast and Upper Midwest. Chris says their daughters use the Kiks as the easiest way to get to friends' houses in the winter.

For more information about the Kik, call the Cardons at (608) 836-1234.





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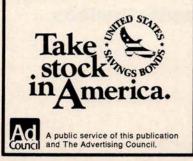
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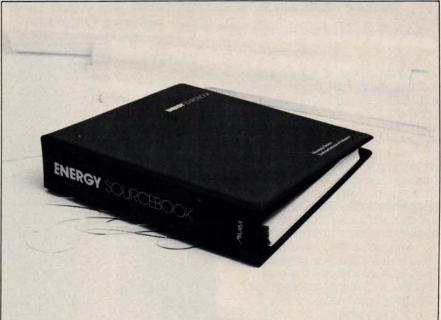
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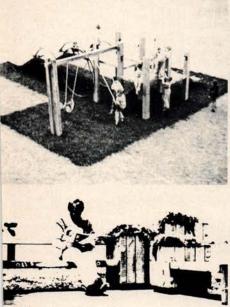
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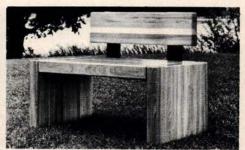
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